

BF

1211

K4

1869





VITAL RESOURCES:

OR,

HOW TO BECOME PHYSIOLOGICALLY

6756

YOUNGER AND STRONGER.

BEING A SCRUTINY INTO THE DOMAIN OF THE LAWS TO
WHICH NATURE SOMETIMES MARVELLOUSLY
RESORTS FOR AID IN ITS RESTO-
RATIVE POWERS.

BY JEROME KIDDER, M.D.



NEW YORK:

PUBLISHED BY THE AUTHOR,
544 BROADWAY.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

~~26.11~~
5472

BF 1211
.K4
1869

Entered according to Act of Congress, in the year 1869, by
JEROME KIDDER, M. D.,
in the Clerk's Office of the District Court of the United States, for the
Southern District of New York.

23

m. B. P. Feb. 11 '08

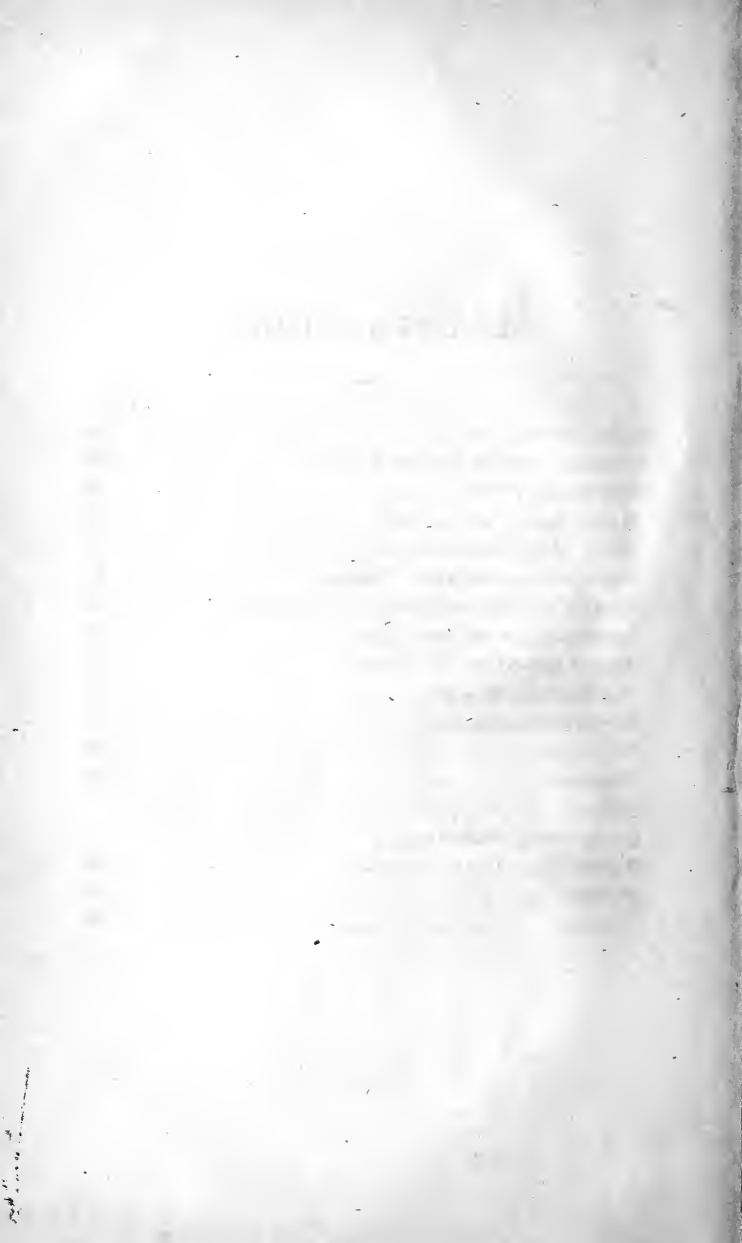
1

1078

108

CONTENTS.

	Page.
Introductory Remarks,.....	7
Plurality of Personality—Mental Phenomenon,.....	11
Plurality of Personality—Anatomical Phenomenon,..	35
Lateral Halves of the Brain and Body,.....	48
Plurality of Personality,.....	64
Metamorphosis,.....	72
Hereditary Influences,.....	75
Underground, or Latent Peculiarities,.....	80
Marriages of Consanguinity,.....	84
Maternal Impressions,.....	88
Appetency—Body and Mind Reciprocate,.....	96
Power of the Mind over the Body,.....	99
Reciency and Influence of Mind,.....	103
Transforming Powers of the Mind.....	104
Has the Mind Contour?.....	105
Why Marriages of Consanguinity Restrict Vital Re- sources,.....	106
Latent Qualities may be Aroused to Action,.....	115
Plural Personality,.....	133
Appendix,.....	145



ILLUSTRATIONS.

	Page.
United Twins,	38
Common Liver of United Twins,.....	39
Four-legged Child,.....	46
Lateral Halves of the Brain,.....	49
Tracts of the Optic Nerves,.....	58
Commissura of the Optic Nerves,.....	59
External and Internal Optic-Nerve Fibres,.....	60
Commissura of the Optic Nerves,.....	61
Objects United in the Vision,.....	63
The Nervous System,.....	65
Egg of Butterfly,.....	72
Caterpillar,.....	72
Chrysalis,.....	73
Butterfly,.....	75
Resources by Parentage,... ..	107
Portrait,	138
Portrait,	140
Portrait,	141

INTRODUCTORY REMARKS.

The phenomena of life is marvelous; and what we know of it is only of its phenomena. What is proposed in this volume, is to open a farther view into this phenomena, which view contemplates the setting forth, that man is endowed with the possession of a plurality of personality, through which, by the aid of favoring circumstances, surroundings and habits, and also by his inherent mental power, his active mental and physical constitution may be changed to a degree so as to secure a new lease of life with its blessings of health and happiness.

The author does not think it very bold in himself to make these apparently strange asseverations, because, if true, there is nothing in them more marvelous than is everywhere presented in the phenomena of nature, nor more unreasonable, when we consider certain facts already known; and also because truth, in contradistinction to error, is not determined by the amount of marvelousness which it inspires, but rather by the evidences brought to its support. And the author proposes, in order to show that they are true, to present such facts in the phenomena of life for the support of them, as are accepted in history; and also, make allusion to such as are universally recognized by the observations of mankind.

The important conclusions presented in this volume, which have been alluded to, will receive support from known physical laws, to which at first brief reference will be given, and then will be shown more fully in delineation those especially that are not so well known to general observation.

Chiefly of importance in the first regard, it may be stated, that by the law of hereditary descent, the child usually resembles one or both of its parents in its mental, moral and physical peculiarities. Also, occasionally, the resemblance is more of a grand-parent, or great grand-parent, or of another person in the same line of ancestry; or the resemblance may be one far back in the line of ancestry. Thus, the hereditary influence often runs "underground" for one or more generations, and may, while in this condition, be considered as latent.

The physiological constitutions of mankind differ, so that the same kind of occupation and associations, the same quality of food, air, etc., is not equally beneficial to all, but rather, that which is good for one is not so good for another.

The mind has great power over the body: the body is affected by the voluntary and involuntary conditions of the mind, favorably or unfavorably, according to what that condition may be: and the will has great power to determine the condition of the mind, and through it that of the body.

And by the reader observing the relation which these facts bear to each other, no matter in what order they be considered, it will be found, as the

author believes, that they are of themselves sufficient to lead us to look for the conclusions previously stated, and which, he thinks, will be sustained by the evidence presented in this volume.

Theories that have no other evidence for their foundation than that their authors *desire them to be true*, have always been abundant enough. It is believed the reader will be convinced that the theories proposed in this volume are founded entirely on a different kind of evidence.

One of the principal observations which caused the author to give thought and study to the feature of this work was as follows: A child about five or six years of age, which especially resembled its father, in the expression of its eyes and general physiognomy, was taken to the same school where its mother had received her early education—there where the same scenes were presented to its view, and the same influences in every way surrounded it. After a few weeks the child had lost the especial resemblance to its father, and now the expression of its features had become unmistakably changed to the resemblance of its mother.

In reflecting on this fact, and bearing in mind the several laws of inheritance, of the power of mind upon the body, the law of latency, etc., to which the author has referred on the preceding page, very naturally the following inquiries would be presented for consideration: .

If the child, at first seeming to resemble more its father, were to have such surroundings, associations, qualities of food, etc., as were more habitual

with its father, would the resemblance of the child to its father more likely be continued and even increased? And was it the change in the associations, thoughts, studies, manner of living, etc., to that of the early days of its mother which caused the child to take on a physiological condition more allied to her?

If scrutiny into physiological laws should show that these questions merit an affirmative answer, then, furthermore, suppose the mother to be strong and healthy, and the father feeble in health, would the child, if continuing to resemble its father in physiognomy, from continuing the influences that so determine,—would the child also then take on the feeble condition of the father and be weakly, and in consequence, perhaps die prematurely? And if by changing to the resemblance of its mother, in physiognomy, from a change of influences, would the child take on the strong, healthy diathesis of its mother also, thus favoring the probability of health and long life? These seem to be very important considerations, and worthy the careful consideration of all people.

This subject seems to open directly to that of the plurality of the personality of the individual man: therefore, the important facts, which have regard to such mental and physical phenomena, will receive immediate consideration in the following pages; and the conclusions which they seem to reveal, if true, may be available for human welfare.

PLURALITY OF PERSONALITY.

MENTAL PHENOMENON.

(1.) Plurality of personality presents occasionally extraordinary and impressive mental phenomenon. In January, 1816, Dr. Mitchell reported to "The Medical Repository" the following case: "When I was employed," says he, "early in December, 1815, with several other gentlemen, in doing the duty of a visitor to the United States Military Academy, at West Point, a very extraordinary case of double consciousness in a woman was related to me by one of the professors. Major Ellicott, who so worthily occupies the mathematical chair in that seminary, vouched for the correctness of the following narrative, the subject of which is related to him by blood, and an inhabitant of one of the western counties of Pennsylvania:—Miss R—— possessed, naturally, a very good constitution, and arrived at adult age without having it impaired by disease. She possessed an excellent capacity, and enjoyed fair opportunities to acquire knowledge. Besides the domestic arts and social attainments, she had improved her mind by reading and conversation, and was well versed in penmanship. Her memory was capacious, and stored with a copious stock of ideas. Unexpectedly, and without any forewarning, she fell into a profound sleep, which continued several hours beyond the ordinary term. On waking, she was discovered to have lost every trait of acquired knowledge. Her memory was *tabula*

rasa—all vestiges, both of words and things, were obliterated and gone. It was found necessary for her to learn everything again. She even acquired, by new efforts, the art of spelling, reading, writing, and calculating, and gradually became acquainted with the persons and objects around, like a being for the first time brought into the world. In these exercises she made considerable proficiency. But, after a few months, another fit of somnolency invaded her. On rousing from it, she found herself restored to the state she was in before the first paroxysm; but was wholly ignorant of every event and occurrence that had befallen her afterward. The former condition of her existence she now calls the Old State, and the latter the New State; and she is as unconscious of her double character as two distinct persons are of their respective natures. For example, in her old state she possesses all her original knowledge; in her new state only what she acquired since. If a gentleman or lady be introduced to her in the old state, and *vice versa*, (and so of all other matters,) to know them satisfactorily she must learn them in both states. In the old state she possesses fine powers of penmanship, while in the new, she writes a poor awkward hand, having not had time or means to become expert. During four years and upward, she has undergone periodical transitions from one of these states to the other. The alterations are always consequent upon a long and sound sleep. Both the lady and her family are now capable of conducting the affair without embarrassment. By sim-

ply knowing whether she is in the old or new state, they regulate the intercourse, and govern themselves accordingly. A history of her curious case is drawing up by the Rev. Timothy Aldin, of Meadville."

(2.) "Tiedeman," says Dr. Spurzheim, "relates the case of one Moser, who was insane on one side, and observed his insanity with the other. Dr. Gall attended a minister similarly afflicted: for three years he heard himself reproached and abused on his left side; with his right he commonly appreciated the madness of his left side—sometimes, however, when feverish and unwell, he did not judge properly. Long after getting rid of this singular disorder, anger, or a greater indulgence in wine than usual, induced a tendency to relapse."* Dr. Caldwell states, in allusion to these instances, that "another case perfectly analogous, produced by a fall from a horse, exists in Kentucky, not far from Lexington."† I have received a communication of a case of a similar nature from a gentleman who was the subject of it. In a letter, dated 25th June, 1836, the Reverend R—— B—— writes to me thus: "You have heard, no doubt, of persons being deranged with one hemisphere of the brain, and setting themselves right with the other. Gall and Tissot, I think, both mention such cases. A circumstance, however, of this kind occurred to myself a few months ago, which may perhaps strike you as singular. I was reading in my bedroom one night,

* Phrenology, p. 37.

† Elements of Phrenology, 2d edition, p. 82.

after a day of unusually hard labor and excitement. All at once I seemed to read my author with *two minds*. To speak more intelligibly, I read at the same time a sentence in my ordinary way, *i. e.*, I understood the sense of what I was reading in a plain, matter-of-fact way, and I read it likewise in a more than usually imaginative way. There appeared to be two distinct minds, in fact, at work at the same page, at the same time, which continued after I closed my book and went to bed. The next morning the sensation was gone, and I have not distinctly experienced anything of the kind since. Do you not think that a different state of activity in the two hemispheres of the brain—perhaps in the region of Ideality and Marvellousness—may account for this? It is certainly different from what is called double vision, for I felt conscious of reading only one page.”

(3.) In Tupper's Inquiry into Gall's System, it is related that some years ago “a man was brought in who had received a considerable injury of the head, but from which he ultimately recovered. When he became convalescent, he spoke a language which no one about him could comprehend. However, a Welsh milk-woman came one day into the ward, and immediately understood what he said. It appeared that this poor fellow was a Welshman, and had been from his native country about thirty years. In the course of that period he had entirely forgotton his native tongue, and acquired the English Language. But when he recovered from his accident, he forgot the language he had been

so recently in the habit of speaking, and acquired the knowledge of that which he had originally acquired and lost!"

(4.) In February, 1822, Dr. Dyce read to the Royal Society the following incident: "A patient, a girl of sixteen, became affected with an uncommon propensity to fall asleep in the evenings. This was followed by the habit of talking in her sleep on these occasions. One evening she fell asleep in this manner, imagined herself an Episcopal clergyman, went through the ceremony of baptizing three children, and gave an appropriate *extempore* prayer. Her mistress took her by the shoulders, on which she awoke, and appeared unconscious of everything except that she had fallen asleep, of which she showed herself ashamed. She sometimes dressed herself and the children while in this state, or, as Mrs. L. called it, 'dead sleep;' answered questions put to her, in such a manner as to show that she understood the question; but the answers were often, though not always, incongruous." One day, in this state, she "set the breakfast with perfect correctness, with her eyes shut. She afterward awoke with the child on her knee, and wondered how she got on her clothes." Sometimes the cold air awakened her, at other times she was seized with the affection while walking out with the children. "She sang a hymn delightfully in this state, and, from a comparison which Dr. Dyce had an opportunity of making, it appeared incomparably better done than she could accomplish when well."

"In the meantime a still more singular and in-

teresting symptom began to make its appearance. *The circumstances which occurred during the paroxysm were completely forgotten by her when the paroxysm was over, but were perfectly remembered during subsequent paroxysms.*"

Dr. Dewar, referring to the above, calls it "an instance of a phenomenon which is sometimes called *double consciousness*, but is more properly a *divided consciousness*, or *double personality*, exhibiting, in some measure, two separate and independent trains of thought, and two independent mental capabilities in the same individual; each train of thought, and each capability being wholly dissevered from the other, and the two states in which they respectively predominate subject to frequent interchanges and alternations."

Dr. Comb is informed by Dr. Abel, of an Irish porter to a warehouse, who "forgot, when sober, what he had done when drunk; but, being drunk, again recollected the transactions of his former state of intoxication. On one occasion, being drunk, he had lost a parcel of some value, and in his sober moments could give no account of it. Next time he was intoxicated he recollected that he had left the parcel at a certain house, and there being no address on it, it had remained there safe, and was obtained on his calling for it."

(5.) The case of George Nickern of New Orleans, was noticed in the news journals last winter, and is further referred to in *Frank Leslie's Illustrated Newspaper*, of March 6th, 1869, as follows:

"The curious, though by no means unexampled

case of George Nickern, a German, of New Orleans, who, after being all but killed by a fall from a platform some months ago, and for many weeks entirely deprived of every sense as well as of consciousness, has recovered his health completely and his powers of mind—his memory excepted, which at present dates entirely from the beginning of his recovery, and is a complete blank as to all and every one—persons, words, things—his knowledge of which had been acquired before the fall, cannot but suggest the question, what relation memory really has to the personal identity of man? The youth seems to have been, for a month at least, in a condition of complete detachment from the outer world, without any power of sight, or hearing, or speech; at the end of seven weeks he had recovered these senses and could use his tongue freely, but he retained no glimmer of recollection of any word, either of his native German, or of English, which he had known before the accident, and his own mother and other friends were to him entirely new acquaintances, whom he had to learn to know afresh. He had to begin acquiring the language of those around him as if he had been an infant, and his progress was almost as slow. Still, all his faculties seemed acute and bright, and, dating from the origin of his new memory, he seemed to retain impressions well. His case is not a unique one. It is not impossible, if we may judge by some similar cases, that he should suddenly recover some day the whole of his suddenly extinguished stock of knowledge.

“There is an old case of a student of Philadelphia whose memory was suddenly annihilated by a fever. He began painfully learning everything afresh, and had got as far as Latin, and had just mastered the Latin grammar, when his whole stock of previous knowledge returned as suddenly as it left him. It is quite *possible* that this New Orleans lad might, if he had a fever or a fresh fall, or any new disturbance of the brain, recover his old memory and lose his new one, *i. e.*, recover the recollection of all that he knew before the accident, and lose the memory of all that he has acquired since. Cases are on record of this sort of alternating memory, due to some fever, the first attack of which modified seriously, we suppose, the condition of the nervous system, and the second attack of which reinduced the old condition of the brain, obliterating completely the latter phase. It is quite conceivable, then, that George Nickern may some day suddenly recover the memory of the first twenty years of his life, and at the same moment lose that of the interval between the end of his twentieth year and the date at which this second solution of continuity might take place. George Nickern is a living example of a man who has pre-existed for twenty years on this earth before his own memory can authenticate for him any one act of his life. In his case we happen to have plenty of witnesses of what he was and what he did before his new term of life began; and we only wish, by-the-way, that the New Orleans physicians would publish an accurate and authentic account of *all*

the discontinuities and continuities between his pre-existent life and character and his present life and character. It is not enough to know that he has to begin learning everything afresh. We want to know whether his *character* is materially changed, and in what direction—whether having been, for instance, cautious or rash, he is now the same, or of an opposite disposition—whether having been kind or inconsiderate, he has altered or not in that respect—whether his moral and religious nature shows any sort of close analogy to what it was before, or any very marked contrast—whether, having been selfish, for instance, he has become disinterested, or having been disinterested, he has become selfish—whether his *tastes* are materially altered or not by the great severance of the thread of his recollection—in a word, in what respects he reminds those who knew him of what he was before the accident, and in what respects, besides his memory, he is changed. The New Orleans physicians ought to carefully investigate and record these things, as it will be obvious to every one that they are of the highest psychological interest.”

(6.) Several interesting cases that seem to be best explained by the recognition of plurality of personality, are mentioned by Prof. Forbes Winslow, in his work on the “Obscure Diseases of the Brain and Mind,” which will be presented here, and explanatory reference will be given to them in another part of this work. “A lady, who died of obscure visceral disease, became delirious three

hours before death. She then began to talk in what appeared to those about her to be the 'unknown tongue.' No one understood a word she uttered. It was eventually surmised that she was conversing in German, a language she had acquired in early life, but which she had apparently forgotten. A native of that country, who was at the time on a visit at a friend's house, was sent for, and conversed with the patient in German. The relations of the lady assured the medical gentlemen in attendance, who were much struck by the singular phenomenon, that she had not spoken the foreign language since she was *ten* years of age! Five years previously to her fatal illness, she accompanied some friends to Frankfort, but whilst there never attempted, although frequently urged, to converse in the language of the country. It was then supposed that all the knowledge she had acquired of German when a child had been effaced from her mind."

(7.) "Dr. Rush alludes to a patient subject to attacks of recurrent insanity, whose paroxysms were always indicated by her conversing in a kind of Italian *patois*. As the disease advanced, and had reached its culminating point, the lady could only talk in *French*; at the decline of her illness she spoke only *German*; and during the stage of convalescence she addressed those about her in her *native tongue*. This lady, when quite well, rarely spoke any but her own language; and if she attempted to do otherwise, always did so with extreme diffidence and difficulty. During her attack

of insanity she spoke with great fluency, never, apparently, being at a loss for words to convey her ideas. It is said that, with the exception of the Italian, the other languages, German and French, were singularly accurate."

(8.) "The Comtesse de Laval had been observed by servants, who sat up with her on account of some indisposition, to talk in her sleep a language that none of them understood; nor were they sure, or, indeed, herself able to guess, upon the sounds being repeated to her, whether it was or was not gibberish. Upon her lying-in of one of her children, she was attended by a nurse who was of the province of Brittany, and who immediately knew the meaning of what she said, it being in the idiom of the natives of that country; but she herself, when awake, did not understand a single syllable of what she had uttered in her sleep upon its being retold to her. She was born in that province, and had been nursed in a family where nothing but that language was spoken, so that, in her first infancy, she had known it and no other; but, when she returned to her parents, she had no opportunity of keeping up the use of it; and, as I have before said, she did not understand a word of Breton when awake, though she spoke it in her sleep. I need not say that the Comtesse de Laval never said or imagined that she used any words of the Breton idiom more than were necessary to express those ideas that are within the compass of a child's knowledge of objects, &c."*

* "Ancient Metaphysics," by Lord Monboddo.

(9.) "A gentleman was attacked by hemiplegia at an advanced age. He passed, a few days before death, into a state of low, rambling delirium. He then spoke only in French, a language he had not been known to speak for *thirty* years before. 'This continued,' says Sir H. Holland, 'until utterance ceased altogether to be intelligible.' "†

(10.) "The following circumstance occurred in a Roman Catholic town in Germany, a year or two before Mr. Coleridge arrived at Gottingen. It was at the time a frequent subject of conversation. 'A young woman of four or five and twenty, who could neither read nor write, was seized with a nervous fever, during which, according to the asseverations of all the priests and monks of the neighborhood, she became possessed, as it appeared, by a very learned devil. She continued incessantly talking Latin, Greek, and Hebrew, in very pompous terms, and with the most distinct enunciation. This possession was rendered more probable by the known fact that she was or had been a heretic. Voltaire humorously advises the devil to decline all acquaintance with medical men, and it would have been more to his reputation if he had taken this advice in the present instance. The case had attracted the particular attention of a young physician, and by his statement many eminent physiologists and psychologists visited the town, and cross-examined the case on the spot. Sheets full of her ravings were taken down from her own mouth, and were found to consist of sentences coherent

† "Mental Pathology."

and intelligible each for itself, but with little or no connection with each other. Of the Hebrew, a small portion of the whole could be traced to the Bible; the remainder seemed to be the rabbinical dialect. All trick or conspiracy was out of the question. Not only had the young woman ever been a harmless, simple creature, but she evidently was laboring under a nervous fever. In the town in which she had been resident for many years as a servant in different families, no solution presented itself. The young physician, however, determined to trace her past life from step to step, for the patient herself was incapable of returning a rational answer. He at length succeeded in discovering the place where her parents had lived, travelled thither, found them dead; but, an uncle surviving, he learned from him that the patient had been charitably taken by an old Protestant pastor at nine years of age, and had remained with him some years—even till the old man's death. Of this pastor the uncle knew nothing, but that he was a very good man. With great difficulty, and after much search, our young medical philosopher discovered a niece of the pastor's, who had lived with him as his housekeeper, and had inherited his effects. She remembered the girl; related that her venerable uncle had been too indulgent, and could not bear to hear the girl scolded; that she was willing to have kept her, but that after her patron's death the girl herself refused to stay. Anxious inquiries were made concerning the pastor's habits, and the solution of the phenomenon was soon obtained. It

appeared that it was the old man's custom for years to walk up and down a passage of his house into which the kitchen door opened, and to read to himself with a loud voice out of his favorite books. A considerable number of these were still in the niece's possession. The pastor was a learned man, and a great Hebraic scholar. Among the books were found a collection of rabbinical writings, together with several of the Greek and Latin authors, and the physician succeeded in identifying so many passages with those taken down at the young woman's bedside, that no doubt could remain in any rational mind concerning the true origin of the impressions made on her nervous system.' "

(11.) "Analogous phenomena are observable in some forms of somnambulism as well as of catalepsy. Sir W. Hamilton quotes a singular illustration from a German book by Abel: 'A young man had a cataleptic attack, in consequence of which *a singular change was effected in his mental constitution*. Some six minutes after falling asleep, he began to speak distinctly, and almost always of the same objects and concatenated events, so that he carried on from night to night the same history, or rather continued to play the same part. On awakening, he had no reminiscence whatever of his dreaming thoughts, a circumstance, by the way, which distinguishes this as rather a case of somnambulism than of common dreaming. Be this, however, as it may, he played *a double part in his existence*. By day he was the poor apprentice of a merchant; by night he was a married man, the

father of a family, a senator, and in affluent circumstances. If, during his vision, anything were said in regard to his waking state, he declared it unreal and a dream.' ”

“ A man loses all knowledge of a language acquired in early youth, in consequence of a severe blow upon the head, the effect of a serious derangement of the cerebral circulation, alteration in the molecular structure of the brain associated with an attack of fever, or the effect of paralysis, or apoplexy. He recovers from illness, but with an entire forgetfulness of a language with which he was previously familiar. He is advised, when restored to health, to re-learn it. He commences with the grammar, and makes an attempt to acquire the rudiments of the lost tongue. While so doing, he painfully realizes the mortifying fact that all recollection of what he had formerly so well known and highly valued is entirely obliterated from his memory. He endeavors to translate some elementary classical work, and during a determined effort to resuscitate his dormant and, to all appearance, lost ideas, and revive former impressions by attempting to construe a difficult Latin sentence, he is conscious of a physical change taking place in the brain :

‘ Quick as Ithuriel’s spear,’

all his critical knowledge of the apparently forgotten language rushes back to his mind ! This illustration is *not* a hypothetical one. The following is an analogous case :

(12.) “ Rev. J. E——, a clergyman of rare talent

and energy, of sound education, while riding through his mountainous parish, was thrown violently from his carriage, and received a violent concussion of the brain. For several days he remained utterly unconscious, and at length, when restored, his intellect was observed to be in a state like that of a naturally intelligent child, or like that of Caspar Hauser, after his long sequestration. The good man again, but now in middle life, commenced his English and classical studies under tutors, and was progressing very satisfactorily, when, after several months' successful study, the rich storehouses of memory were gradually unlocked, so that in a few weeks his mind resumed all its wonted vigor, and its former wealth and polish of culture. For several years he has continued his labors as a pastor, and has suffered no symptom of cerebral disturbance. The first evidence of the restoration of this gentleman's memory was experienced whilst attempting the mastery of an abstruse Greek author, an intellectual effort well adapted to test the penetrability of that veil that so long had excluded from the mind the light and riches of its former hard-earned possessions."

"A gentleman, about thirty years of age, of learning and acquirements, at the termination of a severe illness, was found to have lost the recollection of everything, even the names of the most common objects. His health being restored, he began to reacquire knowledge like a child. After learning the names of objects, he was taught to

read, and after this, began to learn Latin. He had made considerable progress, when, one day in reading his lesson with his brother, who was his teacher, he suddenly stopped, and put his hand to his head. Being asked why he did so, he replied, 'I feel a peculiar sensation in my head; and now it appears to me that I knew all this before.' From that time he rapidly recovered his faculties. A state of mind somewhat analogous occasionally occurs in diseases arising from simple exhaustion. Many years ago, Dr. Abercrombie attended a lady, who, from a severe and neglected diarrhœa, was reduced to a state of great weakness, followed by a remarkable failure of memory. She had lost the recollection of a particular epoch of her life, extending over the period of about ten or twelve years. She had formerly lived in another city, and the time of which she had lost the recollection was that during which she had lived in Edinburgh. Her ideas were consistent with each other, but they referred to things as they stood before her removal. She recovered her health after a considerable time, but remained in a state of imbecility resembling the dotage of old age."

"It is a well-established fact that idiocy, apparently irremediable, connate imbecility, has been cured by a blow on the head! '*Omnia exeunt in mysterium*,' exclaims an old schoolman. Who can fathom the depths, unravel the intricate labyrinths, and penetrate into the arcana of the nervous system?"

(13.) "A child up to the age of thirteen was

idiotic, evidencing either a total deficiency of intelligence, or a stunted intellect of the lowest grade and order. He fell from a height upon his head and was stunned. He rallied from this state of unconsciousness, and was, '*Credat Judæus?*' found to be in full possession of his intellectual faculties!"

"A somewhat similar case is recorded by Louyer-Villermay. A man suffered from a paralysis of memory, following a severe blow upon the head. He was fortunate enough (as the result established) to have a repetition of the physical injury, and, as the effect of this accident, his memory was immediately restored to its original strength.* Petrarch records that Pope Clement VI., found his memory wonderfully strengthened after receiving a slight concussion of the brain."

"‘I have been informed,’ says Dr. Prichard, ‘on good authority, that there was, some time since, a family consisting of three boys, who were all considered as idiots. One of them received a severe injury of the head: from that time his faculties began to brighten, and he is now a man of good talents, and practices as a barrister. His brothers are still idiotic or imbecile.’"†

"Father Mabillon is said to have been in his younger days an idiot, continuing in this condition until the age of twenty-six. He then fell with his head against a stone staircase and fractured his skull. He was trepanned. After recovering from

* "*Dictionnaire des Sciences Medicales*," vol. xxxii, p. 321.

† "*Treatise on Diseases of the Nervous System*," by J. C. Prichard, M. D., 1822.

the effects of the operation and injury, his intellect fully developed itself. He is said to have exhibited subsequently to the accident and operation, a mind endowed with a lively imagination, an amazing memory, and a zeal for study rarely equalled!"

The last several cases (pages 27 and 28), evidence that one of the plural personalities had been in a passive condition, and that the power of the mind is restored by arousing it from that passiveness so that the plural personalities act synchronously and in combination. Further reference to some of those cases will be given in a subsequent part of this work.

The following cases show that a personality which is latent as far as mental expression is considered, and though not aroused by disease or other impression to exhibit mental intelligence, as in the former cases, yet may be, or may become, sufficiently active to receive and take upon itself for awhile, by sympathy, the effects of the injuries or diseases of the personality that has manifested intellectual life, in order to so relieve the latter and aid its recovery by allowing it absolute rest in passiveness.

"Analogous singular inexplicable (as Dr. Winslow says) psychical phenomena are observed in affections of the brain associated with insanity. A man is seized with mental derangement whilst engaged in some manual employment, or when occupied in the contemplation of a particular idea or class of ideas. He recovers, and contemporaneously with his restoration to mental health, the mind recurs immediately to the train of thought or business in

which it was engaged when seized with insanity, all notion of *duration* being annihilated, the interval between the first moment of seizure and the restoration of reason appearing like a blank, or analogous to a troubled and distressing dream."

"Phenomena of a somewhat analogous kind are observed in connection with conditions of sleep and temporary states of morbid unconsciousness resulting from injuries of the head."

"A person of the name of Samuel Chilton, a laborer, of Timsbury, near Bath, in the year 1696, is said to have slept for *seventeen* continuous weeks, from the 9th of April to the 7th of August. Life was sustained by the daily exhibition of small quantities of wine. When he awoke he dressed himself and walked about the room, being, as the narrator observes, 'perfectly unconscious that he had slept more than *one* night. Nothing could make him believe that he had been asleep for so lengthened a period, until upon going into the fields he saw crops of barley and oats ready for the sickle, which he remembered were only sown when he last visited them.'"*

"It is recorded of a British captain at the battle of the Nile, that he was giving an order from the quarter-deck of his vessel, when a shot struck him on the head, depriving him immediately of speech. As he survived the injury he was taken home, and remained deprived of sense and speech in Greenwich Hospital for *fifteen* months. At the end of

* "Fraser's Magazine."

that period, during which he is said to have manifested no sign of intelligence, an operation was performed on the head which almost instantaneously restored him to consciousness. He then immediately rose from his bed, and not recognizing where he was, or what had occurred, expressed a desire to complete the order which had been so abruptly interrupted when he received his injury during the battle *fifteen* months previously."

A farmer of good character, but whose mind was naturally of a melancholy cast, and who had suffered mental affliction, was engaged by a neighbor to enclose a piece of land with a post and rail fence, which he was to commence making the next day. At the time appointed he went into the field, and began with a beetle and wedges to split the timber out of which the posts and rails were to be prepared. On finishing this day's work, he put his beetle and wedges into a hollow tree, and went home. Two of his sons had been at work through the day in a distant part of the same field. On his return, he directed them to get up early the next morning to assist him in making the fence. In the course of the evening he became delirious, and continued in this situation several years, when his mental powers were suddenly restored. The first question he asked after the return of his reason, was whether his sons had brought in the beetle and wedges? He appeared to be wholly unconscious of the time that had elapsed from the commencement of his delirium. His sons, apprehensive that any explanation might induce a return

of his disease, simply replied that they had been unable to find them. He then immediately arose from his bed, went into the field where he had been at work a number of years before, and found the wedges and the rings of the beetle where he had left them, the beetle itself having mouldered away. During this delirium his mind had not been occupied with those subjects with which it was conversant in health.”*

“Mrs. S——, an intelligent lady, belonging to a respectable family in the State of New York, some years back undertook a piece of fine needle-work. She devoted her time to it almost unceasingly for a number of days. Before she had completed it she became suddenly insane. In this state, without experiencing any material abatement of her disease, she continued for about *seven* years, when her reason was suddenly restored. One of the first questions which she asked after her sanity was restored, related to her needle-work. It is a remarkable fact, that during the long continuance of her mental aberration she said nothing, so far as was recollected, about her needle-work, nor concerning any of the subjects that usually occupied her mind when in health.”

In the Transactions of the French Academy of Sciences for 1719, there is published a statement illustrative of the subject under consideration. It is as follows: •

“A nobleman residing at Lausanne, whilst giving orders to a servant, suddenly lost his speech

* “Dr. Prichard on ‘The Diseases of the Nervous System.’”

and senses. Various modes of treatment were adopted to restore his intellect to a sound state, but for a very considerable time without effect. For *six* months he appeared to be in a deep sleep, apparently unconscious of everything. At the end of that period a surgical operation was decided upon and performed. The effect was to restore him to the use of consciousness and speech. When he recovered, the servant to whom he had been giving orders, upon entering the room, was asked by him if he had done what he was requested to do at the commencement of his illness, not being aware that any interval, except perhaps a very short one, had elapsed during his attack.”*

“A girl aged six years, while indulging in a game with her playmates, tossing and catching playthings on the pavement, failed to notice something that was thrown to her, and while hurriedly seeking for and inquiring about it, made a false step and fell upon the pavement. The cerebral concussion appeared to have been violent, and she was watched with much anxiety for about ten hours after the accident. She then, for the first time, opened her eyes and manifested signs of consciousness. She afterwards immediately jumped to the edge of her bed, exclaiming: ‘Where is it? where did you throw it?’ and immediately commenced throwing little articles from her dress, exclaiming: ‘Catch these.’ By these acts she was manifestly continuing those physical operations

* “The Academy received this statement from Crousaz, Mathematical Professor at Lausanne, and author of a ‘Treatise on Logic,’” &c.

and the train of thought which had been so suddenly arrested by her fall. No marked vascular reaction occurred in this case; the pupil was very much contracted during the first six hours of the period of concussion, the pulse soft and hurried; she vomited much, but did not open her eyes at any time until the moment of her sudden restoration to consciousness. Her recovery was *perfect from that moment.*"

PLURALITY OF PERSONALITY.

ANATOMICAL PHENOMENON.

The plurality of the mental personalities of individuals could scarcely, by possibility, have distinctive proof, unless there should be occasionally such phenomena as has been presented in the preceding chapter. And though such phenomena have no reasonable explanation outside the consideration of the plural personalities of individuals, this is not all the kinds of proof that can be brought to sustain such plurality, because, indeed, there is presented for our study many well authenticated anatomical peculiarities that have great bearing upon this subject.

In an essay on "Diplo-teratology," by Geo. I. Fisher, M.D., published in the Transactions of the New York State Medical Society, (Albany, 1868,) is presented strange phenomena of duplication in anatomy; and there are interesting specimens in the cabinet of the "Boston Society for Medical Improvement."

In the *British Medical Journal* of February 13th, 1869, JAMES Y. SIMPSON, Bart., M. D., D. C. L., Professor of Medicine and Midwifery in the University of Edinburgh, says:

(14.) "United twins appear under a great variety of forms, and under very diverse degrees of duplicity. Sometimes the two individuals are complete in all respects, and are found united by the fronts of the chests and abdomen, or by the backs,

or by their heads and scalps, or by the pelvis, or by the arms and sides. More frequently the two united persons are more or less incomplete in consequence of their junction being more intimate and deep at the line of union. The degree of incompleteness which thus occurs, varies infinitely. In some cases they are altogether double above, and altogether single below; or, in other words, they possess two heads and four arms, but only two lower extremities. Others again, are single above, and double below; or they have one head and four lower extremities. Every conceivable gradation is found in the intermediate part and organs, in these varying degrees of double union. But the junctions, however diverse between the united twin individuals, are found to conform to the general teratological law, that in the two, the same parts only unite to the same parts; and not only muscle only to muscle, bone only to bone; but the same muscle in the one twin unites at the line of conjunction to the same muscle in the other twin; the same bone to the same bone; and the same nerve to the same nerve. The same organ and part, as the liver, intestine, pericardium, nose, ears, etc., to the same organ and part in the opposite individual whenever the conjunction extends to these and other organs and parts. This teratological law of the union of like to like—*eadem ibidem*—is, as I have said, a general law in the structure of united twins; but it is not an universal law. For in some descriptions of double monstrosity, when one of the two attached beings has the form of a

dwarfed parasite, the attached parasite does not necessarily conform in its mode and site of attachment to the principle of the union of the same parts to the same parts.

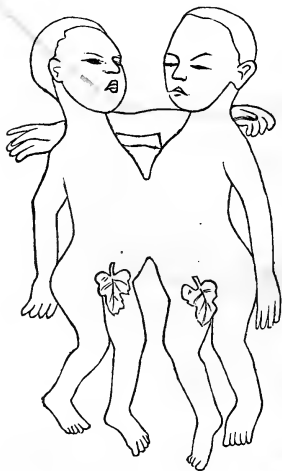
The Siamese twins form the most remarkable instance of united twins in this respect—that, with the two bodies individually complete, they have lived to a more advanced age than any other instance in the records of science. Let me, therefore, state some of the interesting (historical) anatomical and physiological facts regarding them.

They were born in Siam in 1811, and are now 58 years old. In 1829, were brought to the States for exhibition. * * * A curious circumstance which was noticed at a very early period by the twins, is that the two inner eyes—the left one of Eng, and the right of Chang—possess a much clearer and more distinct vision than the two outer. In fact, when the two inner ones are closed they say they are quite unable to distinguish any object clearly.

I have ascertained by experiment, that the right ear of Eng is more acute than his left, and the twins, themselves, know very well that Chang is much deafer than his brother. He does not hear a watch in contact with his right ear.

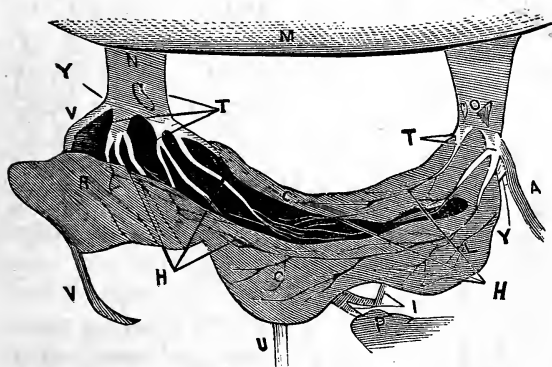
(15.) Professor Allen Thompson of Glasgow, has shown it to be a general law in relation to united twins, that the heart, liver, etc., are inverted in position, or on the *reverse side*, in *one of the two individuals* forming the united twins. This does not seem to hold good in relation to Chang or Eng.

(16.) The following case of united twins, is one of what Geoffrey St. Hilaire calls *autositaries*; two individuals equally developed, and having life in common. They are shown in outline in the following cut:



Reported in the *Richmond and Louisville Medical Journal*, by Prof. A. B. Cook, A. M., M. D., Professor of Surgery in the Kentucky School of Medicine; presented to him by E. C. Bright, M. D., of eminence, Kentucky. These twins were born March 29th, 1865. Their mother was a mulatto, aged twenty-eight years at their birth.

“The connecting band extends from the zypoid cartilages downwards to a point where the natural umbilicus should be; the skin is continuous on each surface with the corresponding abdominal walls, natural in appearance and without any trace of a median line or raphe between them. The band measures in its vertical diameter 4 inches; transverse at the sternal border $1\frac{1}{2}$ inches, at the umbilical border 2 inches; thickness through the lower half $\frac{1}{4}$ of an inch, upper half 1 inch. There



This cut shows the double liver of this interesting case. *R*, right; *L*, left; *C* *C*, centre of the upper surface; *H* *H*, hepatic veins converging and coalescing toward either extremity; *T* *T*, trunks of the hepatic veins; *V*, right vena cava ascendens; *N*, the common venous trunk of the right; *A*, left vena cava ascendens; *N*, the common venous trunk of the right; *A*, left vena cava ascendens uniting with the left hepatic veins to form the common trunk *O*; *P*, small section of liver detached to show hepatic veins at *I*; *U*, umbilical vein; *Y* *Y*, ductus venosus of each side; *M*, common diaphragm, showing the openings for the cavas, *N* and *O*.

is but one common umbilical cord, which enters at the centre of the inferior border of the band, thus forming one single umbilicus for two beings; it is natural in size and appearance, and is composed of one common umbilical vein and four hypogastric arteries with the usual envelopes."

These infants died at birth, and a dissection revealed that the peritoneum (lining membrane of abdomen), formed one great continuous sac, which "accommodated itself to the separate abdominal walls and viscera of each, and a single liver common to both. This viscus occupies an anomalous position: the greater part of the organ is suspended across the upper half of the cavity in the connecting band, the extremities terminating in the right hypo-chondrium of each.

"The parenchymatous structure is analogous to other livers, with this difference: that in this common organ we find no trace of any septum denoting an original development in two parts, and we have two sets of hepatic vessels having a promiscuous distribution, from which common reservoir they distribute to two distinct individuals. In utero they were supplied with maternal blood through one common channel, the umbilical vein; and nourished and developed from one common source, the placental blood, which flowed through one common organ before general distribution. We have, in this abnormal development, an irregular substance suspended in the septum, carrying the life-blood of two human beings. It is covered by peritoneum; the vertical line of its under-surface is

occupied by the trunk of the umbilical vein; on either side two gall bladders, two cystic ducts, two hepatic ducts; further removed from the common mesian plane, and nearer the centre of the under-surface, two shallow fissures, each giving exit to biliary ducts and deep lymphatics distributed to two separate alimentary canals and thoracic ducts, each transmitting a hepatic artery, vena portæ and hepatic nerves to nourish, support and feed a chemical laboratory, which distributes alike its invigorating or baneful fluids to two living beings.

“The office of this liver might be compared to that of a filter, placed in a recess common to two households, and from either extremity pouring out to the occupants a constant stream of pure invigorating fluid, or distributing the germs of sickness and death.

“The physiological questions may be very briefly considered in two relations: first, through the common liver, and second, through the connecting soft tissues. In the liver terminate the peripheral extremities of a portion of the two great nervous systems; the cerebro-spinal axes, connecting its animal sympathies with the cerebrums through some filaments derived from the pneumogastric and right phrenic nerves. The ganglionic systems connecting intimately and inseparably, the organic functions through the hepatic plexuses derived from the solar plexuses of two beings. We have in the nerves, a union of sympathy and organic function. The complicated structure of the organ fits it for its great function, the distillation of the

bile, a constant secretion in greater or less quantities; and constantly delivered from this common source to two digestive apparatuses.

“This fluid, complex in its chemical composition, is not a mere excretion as some maintain; but it is a necessity to nutrition and life, as proved by experiments on dogs in which death soon followed the absence of bile in the intestinal canal. Two lymphatic systems also act their part in the hidden mysteries which govern the laws of health. In short, this single organ performs all the important physiological functions connected with the liver for two individuals.

“The physiological union through the soft tissues of the connecting band are of minor importance, being limited to the capillary inosculation of the sanguineous and lymphatic systems, and the intermingling of the sensor and motor nerves for a short distance on either side of median line. The healthy relations of the two then are common, derived from the same fountain head and disturbed by the same causes.

In their pathological relations any symptomatic disease of the liver, whether functional or organic, would necessarily affect both alike. Functional disorders of any of the duplicated organs, as the brain, lungs, heart, etc., of one would not disturb necessarily the health of the other twin. Local inflammations in one, as pneumonia, nephritis, dysentery, etc., would not be developed in the corresponding organs of the other, but he would only suffer from the symptomatic fever communicated

through the circulation. Idiopathic disease, as typhoid fever, and zymotic disease, as small-pox, rubeola, poison, etc., would affect both simultaneously through the vascular and lymphatic connections. The administration of all remedies, acting through the systemic circulation, would influence both alike in consequence of the two capillary anastomoses—first, and most important, in the liver; and second, in the connecting band.”

T. H. Tanner, M. D.,* reports a case of united twins, female, still-born. The attachment extended “from the top of the thorax down to where the natural umbilicus should be. The *thoracic cavity was common, containing two lungs, one heart and one sternum* (breast-bone.) The *abdominal cavity was common*, ‘having one liver, one spleen, two kidneys, and one set of intestines,’ one single cord and placenta. Second case, reported by J. G. Swayne, M. D.† Sex, male. The union extended from the umbilicus to the top of the thorax. There was one sternum and four clavicles, *one thoracic cavity with a pericardium, containing two separate perfect hearts*, one venous connection through a large branch connecting the right vena innominata of one, with the left vena innominata of the other. In the abdomen there was a single diaphragm, one common liver, one umbilical cord having one vein and four arteries. All the other organs in both cavities were duplicated.

Third case, by W. Wills, Esq.‡ Sex, male; child-

* See Obstetrical Transactions, Vol. II.

† See Obstetrical Transactions, Vol. II.

‡ See Obstetrical Transactions, Vol. VI.

ren were well developed, and connected from the upper part of the thorax down to the umbilicus. Umbilical cord double and in one sheath entered the cavity between them at the band of union; *one large single liver, one gall bladder with two biliary ducts and one large spleen. The intestinal canals and all other abdominal and thoracic viscera were double and perfect.*"

An article in the *New York Times* of April 4th, 1869, refers to several cases of united twins, one, a case described by Dr. Berry, of two girls who lived to be seven years old. "*Food taken by the one nourished the other*, but they were very different in character, and one sometimes woke while the other slept.

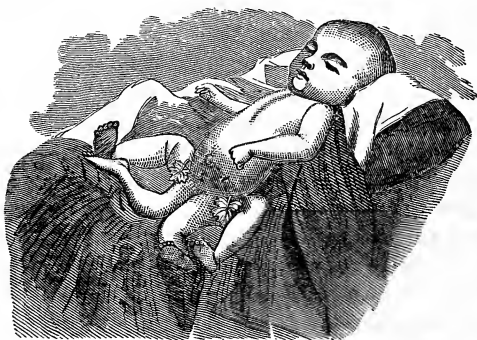
"Of twins who have lived united back to back, the best known instance is that of the two Hungarian sisters, Helen and Judith, who were thus fixed; they were born in 1701, and died at Presburg in 1723, aged 23. Some disorders they had separately; others, as small-pox or measles, together. Judith, always feeble, sank under disease of the head and chest; Helen, who preserved her health well to the last, felt her own strength suddenly fail, though her speech remained entire, and after a brief death struggle, she died with her. Sir J. Simpson saw, in 1856, two female children—Amelia and Christina—then about 5 years of age, united exactly as Helen and Judith. They are said to be now living in the Southern States of America. They were born in Columbo County, South Carolina. Although united back to back, and completely fused,

they were very different in dispositions and temperaments. When they quarrelled more bitterly than usual, they backed at each other with their elbows and knocked with their sinciputs. They ran and walked with facility, one backward and the other forward; and notwithstanding their partial community of body, one was sometimes seen to eat while the other was overpowered with sleep. Sir James Simpson figures and describes in the *Journal*, other twins, partial and complete; as Rita-Christina, who, between thirty and forty years ago, attracted the deep interest of the medical profession in Paris; and Lazarus and John Colorado, born at Genes in 1617, who were twenty-eight years of age when last seen at Basle by Bartholinus. The attached and imperfectly developed twin, John, hangs in the drawing, as in life, head downward from the lower part of the chest of Lazarus."

(17.) In the *Richmond and Louisville Medical Journal* is described the case of a child born on the 12th of May, 1868, in Lincoln County, Tenn. This child, Josephine Myrtle C——, is possessed of one head and one trunk, like those of a living, well-developed, healthy, active infant of about 5 weeks, (June 16, 1868,) whilst the lower portion of her body is divided into the members of two distinct individuals. Professors Joseph Jones, M. D., and Paul F. Eve, M. D., (University of Nashville,) who examined this child, declare their belief, "that the lower portion of the spinal column is divided or cleft, and that there are two pelvic arches supporting the four limbs which are situated upon

the same plane," and from which point below, all the organs are double, there being two pelvic arches—four legs—and in every respect fully duplicated, as the more particular description by the above-named professors fully corroborates, but which it is not necessary here to give.

The author has in his possession photographs of this interesting case, from which the following engraving has been produced :



Josephine Myrtle C——, born the 12th of May, 1868, in Lincoln County, Tennessee.

From the commentaries of Sigibert we are told* of the child born at Emmaus in the reign of Emperor Theodosius, single below the chest (or chests), with four arms and two heads. The two heads were not better than one, for they were differently affected ; one might be crying while the other laughed, one feeding, the other sleeping ;

* Harpers' Weekly.

sometimes they quarreled, and there was a fight of the two pairs of arms. This child is said to have lived two years, one part dying four days before the other, which was killed by the decay of its inseparable neighbor. Cardan tells us of a Milanese girl with two heads, in all other respects single, except that she was found after death to have two stomachs. Among the two-headed women was one in Bavaria, aged twenty-six, of whose two faces one was pretty, the other ugly. In the time of Francis the First of France there was a man with two heads, whose second head grew out of the trunk of his body, and was carried under his waistcoat. This head had a secret hunger of its own, that no food taken by the visible mouth would satisfy.

“Cases somewhat similar to the above have occurred and been described. Rokitsansky refers to two completely distinct bodies conjoined at their *ossa sacra or coccyges*, as in the well-known Hungarian sisters, Helen and Judith, born in 1701, who survived their twenty-second year.

“Geoffrey St. Hilaire, alludes to cases of a trunk with two heads, some even Janus-like, having four upper and four lower extremities.

(18.) “The case, however, recalled most vividly by Josephine M. C——, is that of Rita-Christina, well-known in Europe, and accurately described in this country years ago, by Prof. Meigs. In this wonderful instance, there were two heads, two necks, four arms, *but only two legs*; and was thus the reverse of our case. *From the umbilicus down,*

there was one well-formed child, but above this, all the organs were doubled ; in reality there existed two beings. The rectum and bladder were common to both, but all else in the trunk was double and distinct. One would sleep while the other played, etc., for they had *two spinal marrows, two brains, two hearts*, but the last two occupied a common *pericardium*. Unfortunately, after surviving a little over a year, one sickened and died, when the other, then in health, instantly expired.

“ Rita and Christina were born in Sardinia, 1829, and described by Dr. DeMichaelis, Professor of Surgery in the Royal University of Sassari, and lived eighteen months.”

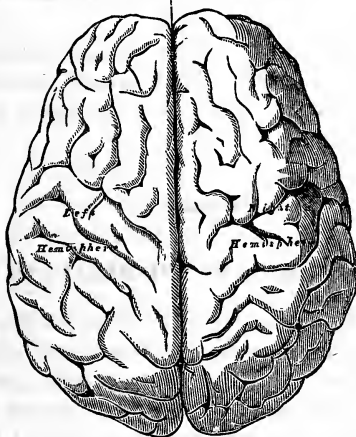


LATERAL HALVES OF THE BRAIN AND BODY.

(19.) “The body consists of two halves, so equal and alike, that it has often been said, that each person consists of two separate individuals.” (Draper.) This seems plain from the evidence adduced in its support, and is accepted in the text books of physiological science. It is not this *hemispherical doubleness* that is proposed to be proved in this work, for that, the author believes, is already recognized, but it is that the hemispheres may be doubled within themselves, tripled, etc., duality not being the definite limit of their plurality. And from the preceding facts presented in this work, it ought not to be supposed that the reader

need be greatly startled at this assertion. But, before proceeding to show this more fully, let us first examine the already recognized principle of duality of man by the two like hemispheres; and in referring to authority, Prof. Draper will be chiefly respected, because of the quite uniform precision of his observations and conclusions.

GREAT LONGITUDINAL FISSURE.



The above diagram shows the two lateral halves of the brain, which is the recognized organ of the mind, the great longitudinal fissure dividing it into two hemispheres.

Also the body entire has its two symmetrical halves, the cranial and spinal nerves coming forth by pairs to their distribution on both sides of the body. Or, rather, we may with propriety

regard the spinal chord as the primary organ and seat of life, as evidenced by the order of its development and by many physiological facts; and the brain is a development on the spinal chord. The great "longitudinal fissure" shows by its division the two lateral halves of the brain.

Wigan has been referred to in "Human Physiology," who studied the duality of the mind and brain through its two hemispheres. "Examining those organs which, by reason of the elaborateness of their mechanism and principles of action, enable us to determine with satisfactory precision the function discharged by each one of the members of the pair, as in the case of the eye or the ear, we may come to the following conclusions: Each is a distinct organ in itself, capable of its meeting the requirements of the economy in a sufficiently satisfactory manner, and therefore forms a distinct whole; but the pair can likewise act simultaneously, re-enforcing, to a certain degree, each other's power, though in this double action there by no means arises a double intensity of effect. The closure of one ear to a sound does not diminish the loudness by one half, nor does the shutting of one eye reduce to one half the brightness of a light: but, though there is not such a doubling of effect when both eyes or both ears are employed, there is a degree of precision in the resulting indication which is not to be gained by the use of one of these organs alone. In such a double organ, then, the result is not so much a heightening of the

final impression as the giving to it of a greater degree of precision.

“Moreover, each organ seems to exert a compensating influence over its fellow in any deficiencies or imperfections it may possess. Thus, it is rare that both eyes are of an equal optical goodness, as most individuals will find on making a personal examination; but in vision with both eyes, the faults of the more imperfect one are merged in the indications of the better, and the same might be remarked of the ear; from which it would appear that this doubleness of organs, is rather for the purpose of introducing a principle of compensation than one of conspiring action, the object intended to be gained being a justness of perception rather than an increase of effect.

“These observations apply to double organs in their normal states, or, if not their normal, their habitual ones: but if to the eye, for example, a temporary disturbance is given, as by pressure, which renders its optical axis oblique, the fellow organ being permitted to retain its usual position, double sight is the result. It is true that, in the habitual divergence of strabismus, such is not the effect, one of the images disappearing, or perhaps the mind *accommodating itself to the habitual condition, combines the two into one*. These circumstances indicate that each member of a double organ can, under conditions of disturbance, exercise an independent and even *opposing action to its fellow*.

“It has by some been supposed that the mind pays

attention to the impressions of only one of the pair of organs at a time: thus, that we see the images furnished only by one eye, though we can with very great quickness direct attention to those furnished by the other, and therefore, deceived by the rapidity with which this alternation of attention can be accomplished, our belief in the synchronous use of both organs is an error. If two differently colored objects, such as differently tinted wafers, be so placed as to be separately and yet simultaneously viewed by both eyes, the mind vainly attempts to combine the two images together. We do not see the resulting form of green tint, but we see, according as our attention is given to the right or left, a blue or a yellow, if these have been the colors of the wafers, and these colors can quickly merge into one another, like dissolving views. There is a simple experiment which serves to support this view, and which any one may readily make. If the open hand be placed along the nose, so as to divide the right eye from the left, and we look upon the surface of a uniformly-illuminated sheet of paper covered with writing, it will be found that we can only read with one eye at a time, but that the mind can with great rapidity determine which eye it will use. In this little experiment, we have, moreover, the means of estimating the relative sensitiveness of the two eyes, and other of their optical peculiarities; thus it will be commonly remarked that, though the paper be, as we have said, uniformly illuminated, that part of it which is regarded by one eye is brighter than that

seen by the other, this being due to a difference in their sensibility. It will also frequently occur that the two portions of the page will present different shades of tint, the one, perhaps, being a faint greenish gray, while the other is of a yellowish white, the proper color given to it by the candle or lamp by which it is seen.

“In this feature of double construction the brain itself participates, presenting a right and left half approaching one another in form, without being absolutely identical. Much, therefore, of what has been said respecting the mutual relations of the right and left eye, and the right and left ear, must apply to the right and left hemispheres of the brain. *Nor can there be any doubt that each hemisphere is a distinct organ, having the power of carrying on its functions independently of its fellow; that, though each can thus act separately, both can act simultaneously; and judging from the cases that have just been presented, it would seem that we are justified in inferring that the common action of the two hemispheres is not for the purpose of a heightening of effect, but only for greater precision, and that in the same manner, as it is a rare thing to find two eyes or two ears of equal goodness, so also it is unusual to have two hemispheres which are precisely alike. The defects of the one may be compensated by the superiorities of the other, and thus a mean result be attained; and as one eye or one ear can, under the proper circumstances, overpower its fellow, so likewise can one hemisphere of the brain, except in certain cases, which have been*

somewhat imaginatively described as insubordination of one of the hemispheres, when insanity is the result, the healthy half being unable to control the diseased one; and for this reason, we often observe of the insane that they have synchronously, or, at all events, in a very rapid alternation, two distinct trains of thought, and consequently, two distinct utterances, each of which may, so to speak, be perfectly continuous and even sane by itself, but the incongruities that arise from the mingling of the two betray the condition of such persons. In this case doubleness of action is seen in its most exaggerated aspect, but in a less degree, it may be remarked, in the thinking operations of those whose minds are perfectly sound. Thus, there is no student but must have observed, when busily engaged in reading, that his mind will wander off to other things, though he may mechanically cast his eyes over page after page, and the same may occur in listening to a lecture or sermon.

“The overcoming of this insubordination of one of the hemispheres may, to a very considerable degree, be accomplished by education, of which one of the chief results is that it exercises us in the habit of thinking of one thing at a time, of thinking therefore without confusion, *and of arriving at conclusions with precision and decision.* And these considerations should also, in Dr. Wigan’s view, be our chief guide in the cure of insanity, doing all in our power to invigorate the action of the healthy hemisphere, and enable it to subdue the insubordination of the diseased one. If both

hemispheres are diseased, the case is almost hopeless.

“Of the independent and yet complete action of each of the cerebral hemispheres, we have abundant and interesting proof. Mental operations can be carried on in a profoundly diseased state of one of these organs, as multitudes of well-authenticated cases attest—nay, even when the lesion has gone so far as to amount to an absolute and entire disorganization of one of the hemispheres. Similar evidence is also furnished by these interesting cases in which, by accident, as by gunshot wound, destruction of one side has occurred.

“Even in a state of health we have numerous examples of this independent action of each hemisphere. While engaged in ordinary pursuits which imply a continued mental occupation, we are occasionally troubled with suggestions of a different kind. A strain of music, or even a few notes, may be perpetually obtruding, and such an occurrence we could scarcely explain save upon the principle of the separate action of these organs, the one interfering with the other. That precision which we have remarked as arising from the conjoint use of two eyes and two ears, is doubtless also attained where the two hemispheres are acting in unison. We can, moreover, voluntarily permit one to rest while the other continues its duty, as we can voluntarily make use of one eye, disregarding the indications of the other; but where it is necessary to execute a critical comparison, or arrive at an accurate judgment of things, both hemispheres are

brought into action, as are both eyes when we intently consider an object.

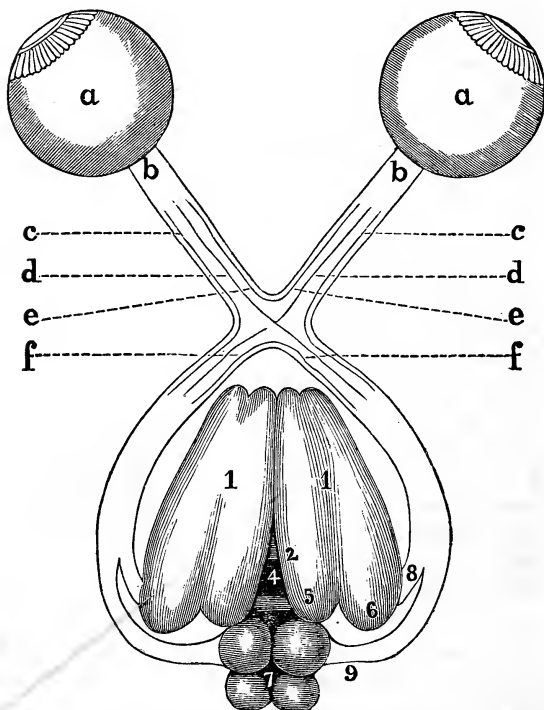
“Among other phenomena, Dr. Wigan calls attention to the operation of castle-building, as it is designated, illustrating the voluntary manner in which we permit one hemisphere to act, presenting fanciful delusions; the other, as it were, watching with satisfaction the operation, and in this respect lending itself to it. Not that for a moment we suppose there is any truth in the ideas suggested, and in this the phenomenon differs essentially from that of dreaming, in which it never occurs to us that the scenes and actions are unsubstantial.

“Still more strikingly do those singular cases, which from time to time present themselves to the physician, of double or alternate consciousness, illustrate this isolated function of the hemispheres. In some of these, which have been carefully observed and authentically recorded, each of these portions of the brain has continued its action for a period of days, or even weeks, and then, relapsing into a quiescent state, has been succeeded by the other, thus presenting, in some degree, an analogy of what is observed in ordinary cases of insanity, so far as the reciprocating action of the two organs is concerned, but differing in the period of duration of their function; and thus, if one of them should have undergone deterioration, or have suffered lesion, so that it has been reduced to what might be termed an infantile state, the impressions formerly stored up in it having been for the most part lost, or there being an incapacity in it to make

use of them, the patient will alternately exhibit what has been aptly termed child life and mature life. For a few days, or perhaps weeks, he will conduct himself in the ordinary manner of an adult, reading, reasoning, and acting, and then, for a similar period, will pass into a condition in which he does not even know his letters, and reasons and acts like a child. These phenomena of alternate or double intellection are interesting in the highest degree."

But here the author would suggest some criticism on Dr. Wigan's views, which is, that these differences of phenomena result from differences in action merely of the two *hemispheres* of the brain. But will such a hypothesis, which institutes such limitation, be sustained by the office of these two hemispheres? The usual action of these two hemispheres is in conjunction, or if not synchronously for precision, then in alternation to afford mutual rest, participating almost uniformly in development, from the mental actions and experiences that advance toward age. Then, as it appears to the author, we must look for the cause of the phenomena of alternate mature-life and child-life not in the two symmetrical hemispheres of the brain, but rather in the plurality of the entire brain doubled within itself, where one by its latency for the most of the time, would, whenever it should become active, not only exhibit more youthful thoughts and habits, but also, even a change of emotional and moral character, appearing like a change of personality.—But this subject will be referred to again.

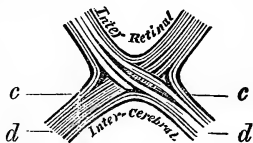
The following diagram illustrates the exceedingly interesting relation of the optic nerves of the two eyes to the two hemispheres of the brain, by which it will be seen that either eye separately, or both conjointly, may convey impressions to either one or both hemispheres.



c c, Tract of outer nerve fibres; *d d*, tract of central fibres; *e e*, tract of inter-retinal fibres; *f f*, tract of inter-cerebral fibres.

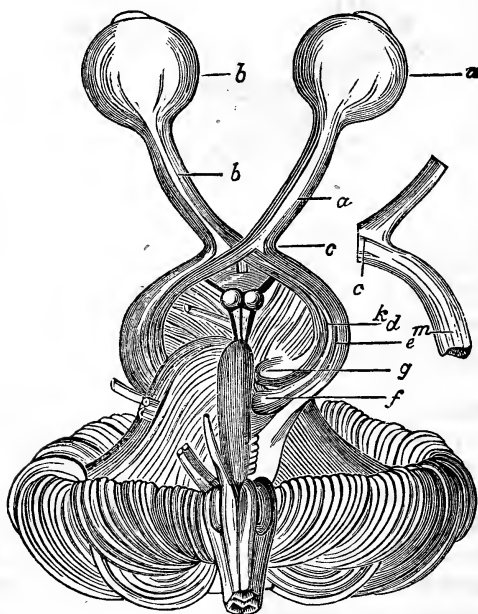
The optic nerves have their anterior fibres, their central or interior fibres, and their posterior fibres. The anterior fibres are commissuras between the two retinae, their tract being denoted in the preceding diagram by the line *ee*. The interior fibres have their tracts denoted by the lines *dd*, each crossing to the opposite hemisphere of the brain. The posterior fibres have their tract denoted by the line *ff*, crossing from one hemisphere of the brain to the other, being a commissure between the two optic thalami. This posterior region of the complex commissura is regarded by Prof. J. W. Draper as being independent of the other parts. It exists in animals which have no optic nerve, as the mole.

According to Metz,* the optic nerves of the two sides partially cross; it contains two kinds of fibres, the external, which proceed from the brain to the external part of the retina (on the same side), and which do not decussate. The direction of these lines are denoted by the lines *cc* in the diagram on the preceding page, and also by *cc*, in the diagram of the *chiasma* here given, which shows the direction of all the nerve fibres. The central fibres of these same nerves, or what is called the optic tracts, as before stated, cross in the *chiasma*, going to the hemispheres of the brain on the opposite sides, as shown at *dd*.



* Anatomy and Histology of the Human Eye.

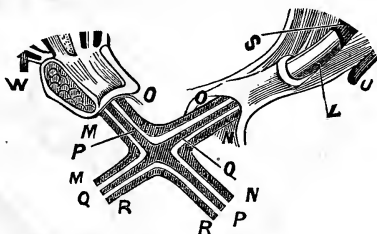
The following cut, from Metz's work, shows the two kinds of fibres of the optic tracts, the external which proceed to the external part of the retina and which do not decussate, and the central which cross in the chiasma; but in this cut the inter-retinal and the inter-cerebral fibres are not shown.



• *a a*, External fibres of the optic nerve and of the retina coming from the corresponding hemispheres; *b b*, internal fibres of the same nerve which originate in the opposite hemispheres; *c c*, chiasma, with inter-crossing of the optic fibres; *d e*, optic tracts, &c.

But Metz shows the chiasma complete, with the directions of all its fibres, in another diagram, made so as to show them distinctly, as here presented.

COMMISSURA OF THE OPTIC NERVES.



O O, is the commissura arcuata anterior, the inter-retinal nerve fibres; *R R*, the commissura arcuata posterior or inter-cerebral nerve fibres; *P P* and *Q Q*, are the commissura cruciata, showing the crossing of the optic tracts from each eye to the opposite hemisphere of the brain; *M M* and *N N*, show the course of the external optic nerve fibres which do not decussate but lead from each hemisphere of the brain to the external part of the retina of the eye on the corresponding side.

Prof. J. W. Draper, in his Text Book of Physiology, presents a very concise statement, recognizing the result of the inter-retinal nerve fibres, which *virtually* make the two retinas as *one encased within the other*. He says, that “while the proper optic tubules of the right eye go to the left brain, and of the left eye to the right brain, the *anterior* band of commissural tubules brings the two eyes into a special relation with one another, the right side of one eye corresponding with the right of the other, and the left with the left; or, to put the same statement under a more simple, yet a more instructive

form, the outer side of one eye corresponds with the inner of the other, and in this manner the two retinæ become as if they were *virtually encased, the one within the shell of the other.* * * * *

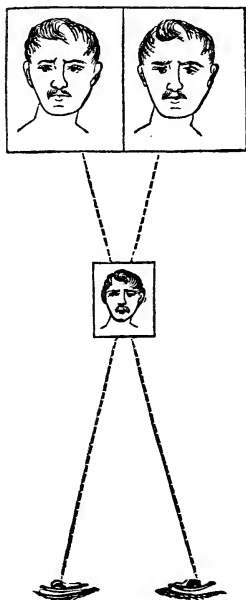
From this commissural arrangement it comes to pass that each retinæ possesses regions of symmetry with the other, and on this singleness of vision depends. Each point of the outer portion of the retinæ of the right eye has its points of symmetry in an inner portion of the left, and when from a distant object rays fall on these symmetrical points, that object will be seen single."

In looking at a single object each eye sees a somewhat different image, because as the eyes are separate a certain distance, the left eye sees more of the left portion, and the right eye more of the right portion of the object; and these two different images, on the two retinas, being merged into one as the mind recognizes it, the idea of solidity is obtained, and also, in other respects, a more perfect comprehension of the image.

If two objects, nearly alike, be situated so that by turning the eyes inward in the position where they would be directed so that each object would be seen by the eye on the opposite side, and thus, the line of vision of each eye crossing so as to make a focus where both images would occupy the same place, a more vivid or expressive feature is given to the object from plurality, as two are now made one to the view; and yet, by keeping the eyes turned in that same direction, and obscuring the rays from entering one eye, the other eye sees

then the less expressive form of the one image uncombined with the other; and by changing so as to obscure only the other eye, the other image is shown in its less expressive and less comprehended form.

The accompanying diagram shows how two images may be made to combine in the vision; and by a little practice, keeping the eyes thus fixed, the experimenter can let his mind, (through the eye,) view either one or the other of the images exclusively, even without obscuring the eye not desired to recognize the image.



The reader's attention is now respectfully called to renewed consideration of those cases where portions of the body are duplicated, such as the lower extremities from the pelvis downwards, as shown on page 46; and also, to the duplicatures of the upper extremities, such as one body having two heads and four arms, or such as two beings, twins, partially united, having various internal organs of the chest and abdomen in common, (page 38.)

Referring to the case of Josephine Myrtle C——, (page 46,) the duplication exists in reality not only

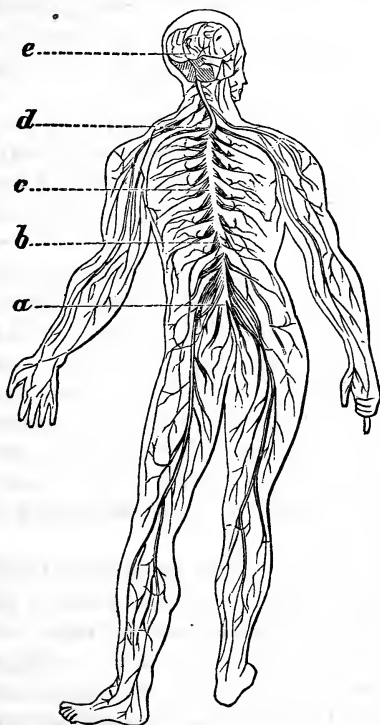
from the sacrum downwards, forming two pelvic arches and four legs, but also the nerves of each limb have their extension through the spinal chord even to the brain. In truth, then, there are two entire bodies, but one of them is enclosed within the other, from the sacrum upwards!

The description on pages 39 and 40, shows two livers united into one. There was but one umbilical vein, *u*, to nourish the two beings with maternal blood; yet, there were two hepatic veins, one belonging to one, and the other to the other personality. Also, on page 43, there is reference to united twins, having thoracic and abdominal cavities common, with lungs, heart, liver, spleen, kidneys and intestines in common; and there was one single umbilical chord and placenta, these were duplicated within themselves; also, (page 43,) another case where the united twins had one thoracic cavity with a pericardium containing two separate *perfect hearts*; and in the abdomen there was a single diaphragm, and *one common liver*.

Now, if two livers can be encased within each other as one, and lungs, and kidneys, etc., why cannot brains be encased within brains, two entire hemispheres of the brain within two other entire hemispheres? And even as the upper portions of the body are thus sometimes encased while the lower are separate, so are the lower thus sometimes encased together while the upper are separate, as shown page 47 (fig. 18) Rita Christina.

Examining the following diagram of the nervous

system, as all the nerves lead to the brain, it is plain that if the body could be double from *a*, downwards, it would not be impossible for it to be



double from *b*, downwards, or *c*, or *d*, or even from the brain, *e*, downwards, making two distinct bodies, which would be twins, as is often the case, and all marvel at an end.

The mental phenomena presented in the case of Miss R——, on page 12, show that there were two brains, one enclosed within the other, but one having been inactive or latent for many years till the paroxysm occurred which aroused it to its first dawn of receiving impressions from the outer world.

There are too many difficulties in the way for the mere duality of the hemispheres of the brain to afford explanation of the phenomena there presented, for one hemisphere could not well remain infantile without also remaining undeveloped in size, for the experiences of thought come easy and natural to the developing brain, just as muscular exercise comes easy and natural to the developing body. Also, if one hemisphere of the brain had been mentally quiescent, and therefore, to a degree undeveloped, the side of the body therewith connected by nerves would also to a degree remain undeveloped; but no notice of such a condition is presented, which would have been noted if such a condition had existed.

That the two hemispheres of the brain may act separately or together is quite well established, but not in such a manner as to account for the phenomena of alternate mature-life and child-life. Then we must look further for a cause, which is, as the author avers, in the plurality of the entire hemispheres of the brain.

Now, if one brain be enclosed within another, and both be active, so as to give greater precision of thought, (intelligence), we ought to look for a

greater number of convolutions of the brain to supply more surface of the gray cineritious substance, which is the oxydizable material necessary to the construction of thoughts.

Now, it is considered as established in the anatomy and physiology of the brain in their relation to the power of the mind, that the greater the number of the convolutions of the brain, and hence its greater surface of cineritious matter, the greater the *brain power*.

Now, what is *brain power*? It is not merely thought, for a brain may think very hard and long, and still think wrong. Merely thinking *hard* does not build the best ships, nor determine beforehand astronomical phenomena. Thinking with *precision*, and long with precision, is *brain power*.

Now, as regards the gray matter of the convolutions of the brain, Sir C. Bell, says: "I have never seen disease general on the *surface* of the hemispheres without derangement of the mind." In general paralysis, whose earliest symptom is some eccentricity or other mental aberration, Wilks recognizes "chronic change in the brain, especially the gray substance.—The wasted brain (convolutions) in delirium tremens, denotes a failure of brain power.

"There can be no doubt that this portion of the brain, (cineritious substance,) is intimately connected with the intellectual operations."—*Wilks' Guy's Hospital Reports*, 1856, (*London*.)

"The observations of Prof. Wagner, who enjoyed several opportunities of examining the brains of

men endowed with great powers of intellect, seem to point to the conclusion that the more richly convoluted brains coexist with great intelligence.”—*See Turner on Convolutions of the Brain.*

“Now, if it be true that the superficial gray matter is intimately connected with mental activity, then it follows that the multiplicity of the convolutions is connected with the developments and increase of intellectual capacity, the substratum of which is the increased quantity of gray matter.”—*See Carl Vogt, Lectures on Man.*

The case of Rev. R—— B——, related on pages 13 and 14, was of a nature to receive the following interpretations: First, If the two distinct minds reading the same page, “one in a plain matter-of-fact way, the other in a more than usually imaginative way,” were those merely of the two hemispheres of the brain, then we must conclude that the two hemispheres differed so much as to cause those differences in contemplating a subject; and we must also conclude that the inter-cerebral nerve-fibres, which unite the two brains through the optic commissura, had some temporary organic lesion, so that the mental actions of the two hemispheres were not combined. But it is established that almost always the organs of one hemisphere have their counterpart in the other hemisphere, developed quite, or almost uniformly, so that the *matter-of-fact way* of one hemisphere would be more likely to be nearly the same *matter-of-fact way* of the other hemisphere. Therefore, would it not be more reasonable to con-

clude that in this case too, there were two entire brains, one enclosed within the other, or existing mutually together with proximity of their nerve cells, from which proceed their parallel nerves? And if this was the condition, then both brains must have been developed to mature life, from acting together, or in alternation, because he views the page not in one case, as an infantile or non-comprehending mind, but in each case as a mature mind, but differing only as differs the quality of those minds; and the cause of the temporary recognition of the two separate minds may have been from some temporary interruption of the condition, whatever it may be, that causes them to act in psychological unity. From the context, in his relation of it, it is plain that he supposed the phenomena resulted from the two hemispheres of the brain only, because such had been the customary manner of explaining it.

Psychological unity of two minds is not a myth. If two persons, in the same room, have their thoughts involuntarily following together on various subjects, which is often found to be the case; or if, as is professionally recognized, two brains or separate hemispheres can act either separately in alternation, or together in absolute unity, why cannot the same result follow from brain within brain?

Different personalities in the same individual may predominate separately, one for a time, and another for a time, not always acting together. As the different emotions and feelings of the thus

changed person are different, therewith the handwriting also corresponds, and the effect is carried out, even throughout the entire organization. Some persons will notice that their handwriting is different at different times, not *merely* by a more steady hand at one time than another, but also by a changed handwriting, as though it were the expression of a different personality, for all the movements of the body express the mental qualities. (See page 105.) In the case of Miss R—, on page 12, it is shown that in one state she possessed fine powers of penmanship, while in the other she wrote a poor awkward hand. This corroborates what should be anticipated, that the nervous ramifications of the plural personalities run parallel to all parts of the body, where all the muscles and tissues are duplicated within themselves.

The bible presents us, in the book of Nehemiah, some strange phenomena, which apparently resulted from no other cause than that of double personality, where there was not entire synchronous psychological unity of minds, or their nervous connections with muscles, of the tongue at least, causing confusion in their speech. Nehemiah says: "In those days saw I Jews that had married wives of Ashdod, of Ammon, and of Moab; and their children spake half in the speech of Ashdod, and could not speak in the Jew's language, but according to the language of each people. And I contended with them and cursed them, and smote certain of them, and plucked off their hair, and made them swear by God, *saying*, ye shall not

give your daughters unto their sons, nor take their daughters unto your sons, or for yourselves."—*Nehemiah, chap. 13, ver. 23, 24 and 25.*

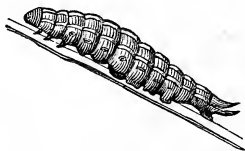
May not the above phenomena have been caused by some prominent and different peculiarities existing, one kind in the Jews, and another kind in the Ashdodites, Ammonites and Moabites, and being developed in the children in such a manner, that they would not synchronously harmonize in their action? And it would not be a strained conclusion, that possibly this want of lingual precision, (stammering,) resulted from the knowledge by the parents that they had married in violation of governmental commands; and this knowledge assumed a mental force, causing this want of co-ordination in lingual expression in the offspring. See the case of the child who could not speak to its father, page 91.

It is remarkable to consider, that those who have lost the memory of portions of their experienced life by sickness or by severe accident, etc., are those whose history shows that they had removed from the place of their former experiences, and therefore had become subjected to the changed influences of different climate, customs, food, mental occupations, thoughts, sometimes another language, and almost altogether another mode of life; or, who, if not having removed, have certainly experienced all or many of these changes, excepting that of climate. (See case 3, page 14; case 6, page 20; case 7, page 20; case 8, page 21; case 9, page 22; case 10, page 22; case related by Dr. Abercrombie, page 27.)

METAMORPHOSIS.

It is a fact worthy of attention, that certain insects change their form and mode of life, making apparently an entire metamorphosis from one kind to that of another, and it may be appropriate here to particularize by brief reference to the caterpillar and butterfly.

The egg is laid by the butterfly, and the cut here represents that of the "Meadow Brown" species. It is shown highly magnified; for the egg itself is so small that it would easily fall through a pin-hole, and the microscope is necessary to reveal the delicate sculpture that beautifies its surface. From this egg is hatched a living, thinking, walking, eating and thriving animal; it is not a butterfly, as was its parent, but it is a caterpillar, which this cut faithfully represents.



The caterpillar feeds on the leaves of certain plants, and is a great eater; in twenty-four hours he will consume more than twice his own weight of food, and his growth is marvelously rapid, for in the course of one month he will have increased

nearly ten thousand times his original weight on leaving the egg.

The caterpillar changes its coat several times, which is called "*moulting*." The outer husk or skin comes off and is reproduced anew; and not only that, but what is additionally marvelous, the lining membrane of all the digestive passages and of the breathing tubes is also cast off and reproduced anew!

But what is more marvelous still, is the change from the caterpillar to a butterfly.

When this change is taken place, the caterpillar passes into an intermediate, helpless, motionless, death-like condition, which is called the CHRYSA LIS or PUPA state. The form of the *pupa* of the Meadow Brown Butterfly, is shown by the accompanying diagram.



Before the caterpillar assumes the chrysalis form, it has to throw off its own skin, carrying with it the whole of its legs, and the jaws too, leaving itself a limbless and apparently helpless mass, its only prehensile organs being a few minute, almost imperceptible hooks on the end of the tail; and by the aid of these, some varieties suspend themselves by the tail only, the head hanging freely in the air; other varieties attach themselves to the supporting object by the tail and also keep the head in an upright position, with a silken girdle looped round the waist—and the marvelously dexterous and slight-of-hand-like movements by which this is accomplished, excite the astonishment of the be-

holder. It has learned from the Great Teacher; therefore, though executing this feat but once in its life, it is done in the most perfect manner.

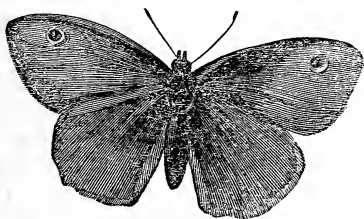
Though the history of the caterpillar and butterfly is exceedingly interesting, yet brevity here is a necessity, because it is the *transformation* itself that is chiefly the pertinent fact to introduce into this treatise.

Through the thin envelope of the chrysalis is shown in careful compactness, all the external organs of the butterfly. The antennæ appear very conspicuous, folded alongside the legs; the wings, yet unexpanded, are visible on each side, very small, yet distinctly seen with all their veinings; and the spiracles or breathing holes are placed in a row on each side of the body.

As the time required for the egg to hatch to a caterpillar varies much, according to temperature, from a few days, when laid in summer, to several months when laid in autumn, and which remain quiescent during winter, to hatch out in spring, so also, the duration of the chrysalis stage is greatly variable, and is likewise dependent on difference of temperature. Thus, it is that one of our common butterflies has been known to pass only seven or eight days in the chrysalis state in the heat of summer; then in the spring the change occupies a fortnight; but when the caterpillar enters the chrysalis state in autumn, the butterfly does not make its appearance till the following spring.

Some learned naturalists have thought they have discovered that the butterfly in all its parts lies hid

under the caterpillar's skin, and can be distinguished under microscopical dissection, and have, therefore, considered that these changes should be viewed rather in the light of successive developments and emancipations of the various organs than as their actual transformations. Certainly, it is true that the quality of the *vital principle* which develops the butterfly, exists in the caterpillar. As regards the fact then, what matters it where is the precise point of time when that vital principle is developed to the degree which shows, microscopically or to the naked eye, the nerves and other outlines of the butterfly. Then whether it is a series of *developments* or *emancipations*, seems to be merely a difference of *terms*, the great fact remains with its undiminished wonder,



that a mere creeping worm becomes gloriously changed to winged being, differing from the former in habits, in food, and in every essential particular, even as widely as any two creatures can well differ; even as widely as a serpent from a bird.

HEREDITARY INFLUENCES.

(19.) Before elucidating the relation of the preceding sections to the conclusions which are the especial subjects of this volume, the author thinks proper to refer to other varied and recognized phenomena, and here would make brief reference to the law of hereditary influences; not brief from want of field and multiplicity of facts, but from the want of occasion here to enlarge upon, and consume time on a subject, with which all people are so familiar, because of the facts being constantly presented to universal observation.

That "like begets like" is a phrase that need not be continually asserted to be believed. The features, complexion, size, strength, voice, movements, appetites, passions, inclinations, idiosyncrasies, diseases, shape in its perfections and deformities, etc., are known to resemble the same in one or more of the individuals, in the line of ancestry; and the resemblance is more like to be of those of whom they are more immediately descended, as of father and mother.

Thomas Watson, M. D., Professor of the Principles and Practice of Physic, Kings College, London, referring to a number of diseases, says that they occur "much more frequently in persons, some one or more of whose ancestors have suffered from them, than in other persons: the tendency is transmitted, is hereditary.

That the circumstances of the parents *do* influence the physical characters of the children, no one can doubt : it is matter of daily observation ; and one of the best possible illustrations of the fact is to be found in what are called family-likenesses. We see children resembling their father, or their mother ; or both parents at once, as mulattoes.

“Every one has heard of, or may remark in portraits, the hereditary thick lip of the Imperial House of Austria. Many persons now living have had the opportunity of tracing the lineaments of our own Royal Family through at least three generations. The sisters of one of our English dukes are remarkably handsome young women, and bear to this day a striking resemblance to the portraits of their beautiful ancestress, the celebrated Nell Gwyn. And independently of the general cast of features, we trace these family-likenesses in minute or unequivocal particulars, as the color of the hair and eyes, the shape of the limbs, the stature of the body, and so on ; nay, in more decided peculiarities than these, in points of unusual formation. You have heard, probably, of the American calculating boy, Zerah Colburn. A great number of individuals of his family, descended from a common ancestor, had six fingers and six toes instead of five. The peculiarity was transmitted through four successive generations ; and probably, could his pedigree have been further traced, through many more.

“Haller gives an account of a web-footed family, descended from a mother in whom that configuration existed. There is now living in London, a

musical composer of some celebrity, in whose person nature has played a similar freak; and whose father, grandfather, and great-grandfather, were all web-footed before him. Beyond this point his information does not reach. I am indebted for the knowledge of this instance to one of my former pupils, Mr. Cooper of Grafton-street.

“Not only the complexion, the features, the stature of the parent, but the various successive phases of the parent’s life, mental and corporal, of health and of decay, are often copied and repeated in the child. In the absence of disturbing agencies, the son attains maturity, becomes grey or bald, acquires a stoop or a round belly, loses his teeth and his memory at about the same age, and after the very same manner, with his father. Particular forms of degeneration and disease unfold themselves at similar periods in both; and thus it is that certain maladies, the tendency to which is interwoven with the original texture of the body, are rightly deemed to be hereditary maladies.”

M. Mingot, of the Hôpital de Chantelle, in the *Gazette Hebd.*, November 6th, remarking upon hereditary tongue-tie, states that “hereditary influence may be observed in *small details as well as in the general disposition of organs.*” He mentions the case of a lad fourteen years of age, whose tongue was kept down to the floor of the mouth in consequence of the short thick frænum which extended to this point. The lad’s mother had precisely the same defect, and of four children, three were born with the same state of the frænum.

The *Medical and Surgical Reporter*, of Philadelphia, August 29th, 1868, refers to a case of hereditary hare-lip in a little girl five years old, lately brought by M. Demarquay to the attention of the Surgical Society of Paris. "The interest of the case lies in the fact that, in the family from the grandparents downward, eleven children have been born with hare-lip, or with a peculiar conformation of the lower lip; namely, two openings on either side of the mesial lines, traversing the whole labial thickness, with a peculiar form of the lip itself."

The *Edinburgh Medical Journal* mentions cases of hereditary cataract cured by operation by Benjamin Bell, F. R. C. S. E. The mother, who is now dead, had been operated on for this complaint at the age of fourteen, with some benefit. An older daughter, aged twenty-five, has very defective vision from the same cause with the rest of the family. Her sister, aged seventeen, was born with defective sight, which became greatly aggravated at the age of six years: she was cured by an operation at the age of seventeen. A brother could see moderately well for several years after birth, but the cataract eventually became complete, and he was cured by an operation at the age of fifteen. Another brother was born blind, but was cured by an operation at the age of thirteen.—*Monthly Medical Reprint*, Oct., 1868.

An able work on "Hereditary Descent," by O. S. Fowler, and published by S. R. Wells, the phrenologist, of this city, is very comprehensive upon this subject, illustrating by examples very satisfac-

torily, the many features hereditary influence of which it treats, some of which are the following: Family likenesses, forms of body, muscular strength, physical debility, marks and excrescences, porcupine men, twenty-four fingers and toes, wens, flaxen locks, early baldness, deformities, gray hairs, length of life, beauty and all other physical qualities, gout and apoplexy, cancers and ringworms, dyspepsia and heart affections, cutaneous affections, blindness, deafness, stammering, dizziness, fits, tic-doloreux, rheumatism, several diseases collectively, insanity, character and shape, races; mental characteristics, as combativeness, destructiveness, acquisitiveness, cautiousness, approbateness, etc.; excessive and deficient appetite, appetite for particular things, cannibalism, love of particular kinds of property, propensity to commit given crimes, the haughty, overbearing spirit, love of liberty and ambition, specific moral faculties, benevolence, spirituality, constructiveness, order, specific intellectual talents, the musical passion, the reasoning powers, etc. The later works of Prof. S. R. Wells give a still enlarging interest to this subject.



UNDERGROUND, OR LATENT PECULIARITIES.

Peculiarities often pass one generation, being latent, as it were, to reappear in the next, or a subsequent generation. The work on Hereditary descent previously alluded to, gives interesting examples of

this kind. "Two of the children of P. R. of Woodstock, Vermont, have little holes or issues just in front of their ears, which discharge during colds; the father has none; but, at the corresponding location, he has a little indentation the size of a pinhead. A sister has it, and her children. His father, through whom this mark descends, has only a slight indentation like that of his son, but his maternal grandmother has it. It therefore passes over one generation in his father and sisters, and two in himself and father, but reappears in the third—his children.

"Mrs. H——, of Boston has bright red hair, not one of her numerous family of children has it, and only one of her grandchildren, of whom she has a goodly number."

Mr. W——, had red hair, yet every one of his children had dark hair, and all his grandchildren except two; but his GREAT-grandchildren all over the country are appearing with red hair. Many who know these descendants and their parents, and grandparents, but not their red-haired progenitor, wonder from what source they derive this peculiarity. In these cases it lies dormant for two generations and appears only in the first and fourth.

"At the Temperance House in Lowell, in 1843, the chambermaid had a cancer on her face. Her father had none, but his mother died of one, and she resembled this grandmother while he did not. Her uncle, however, resembled this grandmother—his mother—and had a similar cancer, as did two of

his children, who also resembled their father, and of course, grandmother and cousin.

In Professor Watson's lectures, delivered at Kings College, London, we find recognition of this very interesting and "curious circumstance observable in regard to these family-likenesses, namely, that they may fail to appear in the child, and yet appear in the grandchild: may skip over a generation or two; may, after lying dormant, break out, as it were, in some collateral branch of the family tree.

"This not only proves that certain physical peculiarities may be transmitted, but it discloses this remarkable property, that peculiarities *not presented nor possessed* by the parent may nevertheless be *transmitted* by him. And this evidently opens a wide field for the operation of hereditary tendencies. A person is not to consider himself as necessarily free from a disposition to consumption or to gout, because his parents have never shown any symptoms of those disorders.

"When one parent only bears the transmissible tendency, the disease appears to be most apt to break out in the children who most resemble that parent in their physical conformation and appearance. Yet this is not a universal rule. I am acquainted with a gentleman who has lost several brothers or sisters by phthisis. The fatal disposition is known to exist on his mother's side, while his father's pedigree is believed to be quite free from it. All the children that have hitherto become consumptive have resembled the mother in bodily configuration and features, except this gentleman,

who is like his father's family, but who, nevertheless, labors under unequivocal consumption.*

"It becomes a very interesting, and a very important question, whether *acquired* peculiarities can be transmitted. I have been told, by a gentleman attending the class, that he knew a man who, having been accidentally deprived of sight, afterwards propagated blind children. I believe however such an event to be uncommon. Dr. Prichard is of opinion that all original or connate bodily peculiarities tend to become hereditary, while changes in the organic structure of the individual from external causes during life, end with him, and have no obvious influence on his progeny.

"I need scarcely say a word respecting the importance to medical men, and indeed to all men, of a knowledge of these hereditary dispositions. Such knowledge ought to regulate, in some degree, the choice of persons wishing so marry. Where both parents have a decided tendency to any complaint, there will be a double probability of a diseased offspring. Lawful intermarriages between members of the same family are often highly objectionable on the same score. Any inherent defect or morbid propensity is aggravated by what cattle-dealers call 'breeding in and in.'"

* "This gentleman, an eminent London physician, has died since this lecture was given."

MARRIAGES OF CONSANGUINITY.

(20.) Previously in this volume is shown that the offspring inherits the peculiarities of their parents, grandparents, etc., and it is not in truth opposed to this law that marriages of near relatives cause the offspring generally to be feebler in mind and body than their parents. Indeed, instead of considering this state of things an exception, we ought rather to look for this result, because we must consider that there are two laws besides that bear upon this subject.

1. It is a law that children inherit not only from one or both parents, but also from grandparents and great-grandparents.

2. It is a law that marriages of unlike persons improve the progeny in physical and mental endowments. Therefore, when the marriages are between relatives, as the children usually inherit the characteristics more of their parents than their grandparents; then, if near relatives marry, it is plain that the resources of this inheritance are narrowed down—are become more limited—and the result is exactly what we ought to expect. It is well known that domestic animals are improved by crossing the breed, and that they are deteriorated “by breeding in and in.” And this law extends not only throughout the animal kingdom, but to plants also.

Illustrative cases of the effects of intermarrying

with blood relations are given extensively by Josiah Coffin, from which are here condensed the substance of a few.

N. P——, of W——, married his cousin; had three children; all weak in intellect; one was clump-footed, another had but one eye. Mr. and Mrs. E——, were cousins; had two children; one weak in intellect, the other almost an idiot. A family in N. B——, Mass., where were a number of foolish children, were the offspring of cousins. The Rev. Dr. Dufield, formerly of Philadelphia, mentioned two or three families in the interior of Pennsylvania, who had intermarried, to keep their property among themselves, for several generations, till their posterity were nearly idiots. L. H——, of N——, Mass., married his second cousin, and had one daughter who was nearly an idiot. S. L——, of N——, Mass., married his second cousin; had ten children; all living, 1841; four of them were unable to walk; were hauled about in carriages designed for that purpose, and one of these was deaf and dumb; another became helpless from numbness beginning at the extremities and extending; the others grew lame in the same manner. In the town of P——, N. Y., where the parents were cousins, all of their ten children were destitute of the ordinary powers of understanding. Mr. E. S——, of Mass., married his cousin; they were both of strong mind, firm nerve, and sound health; they had seven daughters and one son; three of the daughters were “deranged,” the rest were of feeble health, and very nervous.

Mr. P——, of B——, Mass., married his second cousin, and their oldest child is too deficient in mind to take care of himself. J. P——, of W——, married his cousin, and one of their children died an idiot: two sons died at the age of twenty-three, of feeble bodies and irritable minds; and one girl had diseased eyes: some of the boys were club-footed, wry-necked, etc. Mr. E——, of Mass., married his cousin; had five daughters and three sons; one of the daughters was an idiot, painful to behold; two of the other daughters are foolish, the other two are weak: one son was weak-minded, and had been lame: one son ran away with the town's money; the other son was a worthy, upright man, but was unfortunate in all his undertakings. Many other similar cases were given by Mr. Coffin. Prof. Fowler, has given many cases illustrative of this law, and a few of them will here be referred to.

C. W—— married his cousin, and of his six children, three were deaf and dumb. Mr. B—— of N. H., married his cousin, and had eight children, four of which died early; one kept his cradle till five years old, when it died; three had moderate capacities, two were complete idiots, and one, the only bright one, had no legs, and only a stub of the right arm. By a second marriage, Mr. B. had two bright children. Mr. N—— and his cousin, both intelligent, married, and of their seven children, three were crazy, two very weak in intellect, one was merely passable, and one was fair. Mr. Foster, who taught in the deaf and dumb asylum,

Philadelphia, stated, that of seven children of first cousins whom he knew, six were idiots, and one mute but intelligent; and of another family, two of the children were mute idiots, and three others were mute but intelligent.

Mrs. Maurice, of Boston, said that while living in a neighboring town, the strange and foolish speeches of some of her son's schoolmates, as reported by him, arrested her attention, and inquiry disclosed the fact that they were made by the children of cousins and that out of five pairs who had married cousins, four had idiotic offspring, and the children of several of the others were not considered intelligent.

In the town of A——, N. Y., Prof. Fowler examined the heads of two idiots, the offspring of cousins. That of the eldest measured only nineteen inches, though twenty years old, and of the youngest only seventeen—less than infants' heads. They could barely swallow, but could neither feed themselves nor walk. One of this unfortunate family had just died, and another some time previously, both total idiots. Only one escaped either idiocy or death in infancy, and this one had barely sense enough to take care of himself.

The many other cases which are well authenticated, given by Prof. Fowler and others, need not be presented here, as these should suffice.

The *Medical and Surgical Reporter*, of July 11th, 1863, (Philadelphia,) has the following impressive illustration of this law: "A paper was read from Dr. Balley, Military Physician to the

French army, at Rome, containing some facts tending to confirm the injurious effects of marriages between relatives, effects, it appears, which may remain dormant until the second generation. One of the cases quoted was that of a Frenchman and a German, the former remarkable for his intellectual powers. Of his three sons, only one, the youngest, is in a normal state, the eldest being deformed, and the second, deaf and dumb. The fourth child, a daughter, is *half an idiot*. The father was born of *cousins-germain*. In another case of marriage between cousins, the mother had several still-born children, and then others that were deformed and died soon. The only surviving one is rickety and otherwise affected with disease. In a third case, two children were born both weak and stupid."

MATERNAL IMPRESSIONS.

POWER OF THE MIND.

(21.) Mysterious indeed is the power of the mind of the mother to qualify, perfect, or derange the organization of the child before it is born into the world.

Dr. John S. Beale communicates to the *Medical and Surgical Reporter*, Philadelphia, the case of Mrs. N——, of highly nervous temperament. About ten weeks previous to delivery, she had

a few scattered spots of "herpes" on the front of her chest, "which disappeared under ordinary treatment, when some kind, good-natured, knowing old woman informed her it was the 'small-pox, and that without doubt her child would suffer from the same disease.' The bare notion of this preyed very much upon her mind, and her husband and myself both failed in driving the absorbing notion from her brain.

"On the child being born, I noticed it had been dead for several days, the head, face, and whole surface of the body being covered at about three-quarter inch intervals with pustules, exactly resembling in size, form, and appearance, the *small-pox vesicles at maturity*. The depression in the centre was plainly marked. When the topmost cuticle was detached, there was no fluid of any sort underneath. The mother's first remark was, 'Is the child marked?' She fully believed it would be so."

Dr. Beale reports other cases as follows: 1. "A child born with one eye of a light-blue color (right eye); the other a dark hazel. Mother says she had seen a child with similar eyes sitting on a doorstep in Lisson-grove.

2. "Child born with mouth and upper and lower extremities resembling those of a dog. Mother states that she was worried and torn by a dog whilst she was in the seventh month of gestation.

3. "Child born with left eye blackened as from a blow. The mother stated that her husband came home irritated, and struck her (eight hours pre-

vious to her confinement) on the corresponding part of her face.

4. "A child born with four little fins or stumps for upper and lower extremities. The mother had been frightened by seeing a man maimed in his lower extremities, who used to traverse the streets on a board with wheels.

5. "Child born ten nights after display of fireworks in commemoration of Crimean war. Child's feet were covered with bladders of serum, similiar to those arising from scald or burn. The mother was alarmed by the descent of a stick of a discharged fire-rocket, which struck the roof close by the place where she was standing."

Another case (*Reporter*), given in the *Deutsche Klinik* for Sept. Child born well developed except that it lacked abdominal parieties. The mother had seen a sheep wounded and with its bowels protruding, at which she was greatly shocked, and did not recover her composure for several days. Another child was born with a hare-lip. The mother had seen a boy having this deformity.

Another, remarkable and sad case, is given by Dr. Crawford, in the *Nashville Journal of Medicine*: "A lady in the last stage of gestation was burned by the explosion of a kerosene oil can. She lived twelve hours after the accident. The face, legs, arms, and abdomen were completely vesicated, and in many places the skin was entirely destroyed. The movements of the child were felt three or four hours after the accident. A short time before the death of the mother she gave birth to the child at

full maturity, but still-born. *It bore the mark of the fire corresponding to that of the mother. Its legs, arms, and abdomen were completely vesicated, having all the appearances of a recent burn.*

“A very important physiological fact, if Dr. Crawford was not mislead.”—*Medical and Surgical Reporter.*

From the *New York Herald*, Sept., 1868, the following singular instance is given: “A Vermont paper says:—There is a man in this State who cannot speak to his father. Previous to his birth some difficulty arose between his mother and father, and for a considerable time she refused to speak with him. The difficulty was subsequently healed, the child was born, and in due time began to talk: but when sitting with his father was invariably silent. It continued so until the child was five years old, when the father, having exhausted his powers of persuasion, threatened it with punishment for its stubbornness. When the punishment was inflicted it elicited nothing but sighs and groans, which told but too plainly that the little sufferer could not speak, though he vainly endeavored to do so. All who were present united in the opinion that it was impossible for the child to speak to its father. Time proved this opinion to be correct. At a mature age its efforts to converse with its parent could only produce the most bitter sighs and groans.”

Prof. Brittan, in his work on “Man and His Relations,” gives several interesting examples of this law: “A lady, who, during the period of approaching maternity, was chiefly employed in read-

ing the poets, and in giving form to her day-dreams of the ideal world, at the same time gave to her child (in phrenological parlance), large *ideality* and a highly imaginative turn of mind. Some time since I met with a youth who has finely moulded limbs and a symmetrical form throughout. His mother has a large, lean, attenuated frame, that does not offer so much as a single suggestion of the beautiful. The boy is doubtless indebted for his fine form to the presence of a beautiful French lithograph in his mother's sleeping apartment, and which presented for her contemplation the faultless form of a naked child.

“On one occasion, after the delivery of a lecture in a small town in central New York, I went to the house of Mr. K——, to pass the night. My theme had been, the power of the mind as exhibited in the organic formation and vital action of the body, and also in the various expressions of which the human face is susceptible. Mrs. C——, who was a member of the household, intimated a desire to exhibit a marked illustration of the subject. Accordingly, calling her little son, of the age of three years, to her side, she exposed his back to the inspection of the company. Between his shoulders there was a most perfect representation of a mouse. The mark—which was elevated somewhat above the surrounding surface—was literally covered with a thick coat of fine hair, like that of the animal represented; and, what was still more surprising, the cuticle also precisely resembled the skin of a mouse.

“Some years since, the writer was acquainted with a married lady, who lived in Fairfield county, Conn., and was universally respected and esteemed for her exemplary life and unblemished character. She was strongly attached to her church; and her pastor—who was an earnest and forcible speaker—realized her ideal of early and uncorrupted manhood. The lady was accustomed to listen—on each succeeding Sabbath—to his eloquent discourses, with reverent and rapt attention. She possessed a lively imagination, and a strong, but doubtless a strictly legitimate interest in the young clergyman; and the image so often presented to the eye and the mind, was transmitted to another. During the second year of the ministry of Mr.—, in that place, the lady referred to became the mother of a son, who, from his birth, was observed to resemble the minister; nor is the likeness less apparent since the child has become a tall and graceful youth.

“A gentleman of our acquaintance, who has very dark eyes, hair and beard, is wedded to a lady with brown hair, and a complexion not lighter than his own. Of nine children—the offspring of their marriage—six are living, and, with a single exception, they all have dark, straight hair, and hazel eyes. Indeed, for several generations, not a single member of either family has had curly hair. The exceptional case is a fair youth with large, blue, expressive eyes and golden locks, with a natural tendency to curl. Some time before his birth the parents had occasion to spend a month with a family in Boston, where there was a radiant child with

delicate skin, mild blue eyes, and a profusion of sunny curls. The lady visitor became deeply interested in that beautiful child, and often gazed at it with rapturous admiration and delight. The strong impulse of the mind thus *electrotyped the image on her own offspring*, so regulating the subtle processes of the vital chemism, as not only to determine its general complexion, but also the precise color of the hair, and even blending the sublimated elements in the organic chemistry of the eye with such nice precision as to fix and reflect the violet ray.

“A gentleman who resides in Le Roy, N. Y., in an interview with the writer, some time since, related a singular fact, that may be appropriately introduced in this connection. His wife had a beautiful picture of John the Baptist hanging in her room. The figure was in a nude state, except the loins, which were encircled with the girdle of camel’s hair, supported by a single strap passing over one shoulder. The lady being in delicate health for some time, (antecedent to the birth of a son, now some sixteen years of age,) had occasion to spend much of her time on a couch from which the picture was constantly exposed to view. The youth referred to presents one of the greatest novelties in the category of psychological phenomena. It is a curious fact that *he will never wear but one suspender!* If commanded to put on a *pair*, he will obey; but he is quite sure to have them *both over the same shoulder that supports the strap and the girdle in the picture.*

“I well remember a young man, whose earth-life, of some thirty year’s duration, was the frightful embodiment and expression of one terrible scene. He had not opened his eyes to behold the light of the natural world, when a desolating tornado passed over his native town. The tall oaks, which had braved the storms of centuries, bowed low as the slender grass bends in the summer’s breeze; or, rather as the grain is leveled by the reaper’s sickle. It was a fatal hour! The sufferings of many years seemed condensed into one awful moment of unspeakable horror, and the terrible scene cast its dark shadow over the whole life of a human being. That tempest was reproduced in that man. For nearly thirty years—and until the close of his mortal existence—his eyes rolled in their sockets with a strange delirious expression. Ever and anon he sighed heavily, as the winds sigh through the tall trees; and his head and all his limbs swayed to and fro, perpetually, as the forest boughs are moved when the breath of the tempest sweeps over them. Poor mortal! his melancholy life is over, and he has found rest at last where the storms of earth and time shall disturb his repose no more!”

APPETENCY.—BODY AND MIND RECIPROCATE.

(22.) As the constitutions of all animate beings differ more or less, so also the appetencies, (appetites determined by the wants of the system,) which they possess for obtaining their nourishment differ in the same degree. The maggot, or being of whatever kind, that rejoices in the condition of the elements of the decaying carcase, satisfies there with relish its normal appetite; and such food is of the proper quality to nourish that being; but that same, as food, is not proper to nourish certain other more exalted beings. If the same kind of food be given to different beings, as reptile, quadruped, or man; in the different kinds of animals it is subjected to a different chemical elaboration, so that different elements and combinations are selected and made use of to nourish the being. And even different members of the human family build up their constitutions by different appetencies, having preferences for different kinds of food: or if the food for the different individuals should be of the same kind, the peculiar appetency of each individual would make somewhat different selection of elements through a modified vital chemical elaboration. Even the taste of the same food is not the same to all men. Now if this is not so—if the taste of the same food *is* the same to all men, then why should it not extend as a rule to all animal life; and why should not then the taste of carrion to

the maggot be exactly the same as its taste to man? But we are conscious that this is not the case.

Yet the appetencies are susceptible of modification; the constitution yields or makes a compromise so as to tolerate, or even enjoy bad food, bad drink, etc.; and the physical constitution is by it in a degree changed when the governing appetency, as it may from long habit, has become modified, and the mind, or the animate principle, receives also the modifying impression, and is changed somewhat in the plane of its being.

An impression therefore operates from the character and condition of the food; but as action and reaction are always equal, whatever be the sphere wherein we may recognize them, we must, and do find, that either exaltation or debasement of that which we call mind or spirit, must have its characteristic reaction on the body which it participates in constructing, if, indeed, it be true that the mind partakes in the office of determining the shape and constitution of the body.

(23.) Facts bearing on this subject will be found in other parts of this volume; and I may here appropriately give these features of the subject. Contentment of mind, which usually results from success in laudable efforts, does not conflict with or retard, but rather contributes to the favorable development and health of the body; or rather we may consider that when the true wants of the body are supplied, the mind is at ease as a result of this condition. The body has its instinct; it seeks its normal wants; and if these wants are not supplied,

the body is uneasy and causes the mind also to be uneasy, for the body looks to the mind as an intelligent agent to supply its wants. The pleasures and pains of both body and mind are reciprocal, and react upon each other. The body wants proper food, air, water, warmth, exercise, etc. The mind wants these also, *because* the body wants them,—the mind feels the distress if the body be not supplied with them. The mind wants genial associations and sociabilities—it wants the beautiful, the melodious, the sublime, the harmonious, the lovely, the sympathetic, and it wants proper occupation for the exercise of its powers; and if it do not have these, the body sympathizes with the mind, proving that the body also feels this want. Thus, are the mind and body interchangeable in their influences, and mutual in their relationship.

And it is well that this law of mutual relationship exists between the body and the mind, because even when the wants of the body are not fully satisfied, the power of the will may make this law available for good by accepting reverses with fortitude and a calm acquiescence, which has a compensating influence upon the body to sustain it through its wants and hardships.

Also, as relating to this subject, how pertinent is the remark of Dr. Trall: "People who live, move and have their being under one dull monotonous routine of circumstances, become mentally stupid and physiologically indolent and sensual, for want of suitable external circumstances to call out the mind and exercise the body."

Here we may appropriately call to mind the fact, that some people frequently change their place of living, their associations, and also their occupation; and the cause of this may be not so much, or perhaps not at all, from any fickleness of mind, nor from want of remunerative success in business, as from a real demand of the mental and physical constitution of the individual. Perhaps from the inheritance of a constitution not strong, or which has a tendency to some disease, the change of business, offering another range of thought, is a salutary one when it is sought for or craved by the mental intuition.

POWER OF THE MIND OVER THE BODY.

Mysterious as these things are, yet it is well known that the mind may exercise great power upon the body. How the mental feelings of modesty or embarrassment influence the capillary circulation to crimson the cheeks—how fear causes paleness, and how depressing emotions weary and have exhausting influence upon the vitality, diminishing the appetite and with it all the normal vital processes. Bad news, forebodings of ill, disappointed hopes, inordinate anxieties, domestic unhappiness, unhappy business relations, imaginary disaster, etc.,—these, and immeasurably more, have their power to establish lingering or perhaps fatal disease.

In the *St. Louis Medical and Surgical Journal*, (July 1868,) is mentioned a case of paralysis coming on suddenly from mental shock, and also disappearing suddenly from exhilaration and joy. Miss. R., a girl about fourteen years of age, very sprightly and intelligent, and of a very sensitive and affectionate disposition, although not very robust, had always enjoyed excellent health until the latter part of June, 1868, when "she became very much alarmed about the safety of her father—a man of very regular and domestic habits—who failed to come home one evening at his usual hour. Towards midnight the mother showed much uneasiness, seeing which, the daughter became exceedingly depressed and fearful, and when her father reached his domicile he found both wife and child in a state of terror bordering on despair. In the morning the girl did not appear at the breakfast table as usual, and being asked why she did not get up, replied that she had tried, and found that she had lost the power of her lower extremities; said she had a headache and had slept none, and had a peculiar painful sensation along her back and in her legs."

Her physician states, that on learning the above facts, he endeavored to impress the parents and the patient, "with the belief that her apparently alarming symptoms were only nervous, and of a hypochondriacal character, resulting from the mental trouble and anxiety of the previous evening. He also tried to rally and banter the girl out of the notion that she was paralyzed, and insisted on her

getting up and walking; after her mother got her out of bed he caught hold of her, and in a jocular and persuasive manner, dragged her along the floor; but she seemed to have no power to move her lower limbs, and he had to hold her up whilst they hung dangling after her. He could pinch them or prick them with a needle without her evincing much feeling, although their temperature was normal, and her general symptoms favorable with the exception of a slight acceleration of the pulse." No medical treatment had any effect to restore this patient, and she was sustained almost entirely by tonic medicines for five months, when one morning, in the latter part of December, her mother gave birth to a child; one of the ladies present opened the door of the adjoining room where the "patient was sitting, and joyfully announced to her that she had got a little brother; at that moment the baby squalled lustily, and the invalid jumped up and ran into the mother's apartment and caught up the child and kissed it frantically! From this time her paralysis was gone; indeed, she seemed so rejoiced that she could walk that we had to restrain her from exercising her limbs too much. At first her gait was staggering, but in a few days her locomotion was excellent, and she still continues to have perfect use of all her muscles. At this time her back and limbs seem as strong as ever; her appetite has returned and her general health is very good."

Prof. Watson, of King's College, London, when speaking of epilepsy, says that any strong mental

emotion is apt to produce the fit in a person who is already subject to the disease. He also states, that a singular occasional cause of epilepsy, is the sight of a person in a fit of that disease.

The depressing mental emotion, as of the loss of property, besides doing injury to the health has caused the hair to turn prematurely gray; and most people are familiar with the relation of the following circumstances: To test the effect of fear, three persons, separately, one after another, by agreement among themselves, met a fourth person who was in robust health and observed to him, "How ill you seem to be," etc. The effect was immediately apparent: he was taken with serious illness, produced entirely by the effect of their statements upon his mind. Also, it is related by accepted authority, that a criminal condemned to death was submitted to the experiment of making him believe that he was being bled to death. He was blindfolded, a small stream of blood-warm water caused to run down his arm; and this, together with the remarks of the by-standers, "How pale he looks!" "What deep color of the blood," etc., made such impression on his mind as caused him actually to expire.

A wager was made with a person that he dare not sleep in a room where there had been a case of cholera. He retired to the room and was attacked that night with actual cholera, and though no one had been sick there as had been represented, and though this fact was then made known to him, it was too late, and he expired.

RECIPIENCY AND INFLUENCE OF MIND.

(24.) Images of the beautiful are reflected in the mind, and the condition or quality of the mental entity is modified thereby. If the mind dwells on beauties, doth it not become itself impressed with the beautiful? They who are favored by time, circumstance, capacity and inclination, to let their thoughts dwell upon the beautiful and the lovely, show to our observation that such genial habitude of mind has a transforming power upon the individual. They seem more truly to comprehend the sublimity, which ordinary intelligence teaches us exists in the scenery of nature. They tell us of their happy and exalted impressions while contemplating the rainbow-arch, the morning sunlight thrown from the snow-capped mountain, the moor-beams smiling over the sleeping hemisphere, the summer's green, the variegated robe of the autumn forest, the gaudy sunsets closing the days in the western horizon, the elaborate-tinted flowers that cast their beauties around our feet, the jeweled firmament of heaven, with wonders for the effort of reason peering into space, where the Omnipotent hand holds the centripetal cords of orbitular worlds, giving evermore to them arrayed glories in their ever changing circles—there “where the senses of thought may be overwhelmed, till the spirit seems to hear even the music of the spheres.”

Reflections upon varied beauties and loveliness, on whosever constitution they can act with power,

must carry their influence beyond the mind by their continued influence, and change through successive generations, even the body to a more exalted form of humanity. And the appetency also would be modified, so that the subject would relish that kind of food, or select from the food the portions and combination of elements which are better adapted to nourish more exalted beings. Images of the beautiful have power also to transform to their similitude the subject receiving that impression, more especially when received in a hereditary manner from the impression which has a long time acted on the parents' mind.—(See page 94.)



TRANSFORMING POWERS OF THE MIND.

(24.) The transforming powers of the mind are rather positive in their nature. A brief illustration of this, in Prof. ~~Fowler's~~ ^{Ellis's} great work on Physiognomy, is very apt, and I will here quote it: "The change in calling or position in life, produces a change in expression, a change in faculties, and a change in the disposition. Let us suppose the reader to be a clergyman. He will in time take on an expression peculiar to his high and holy avocation; but at the end of ten years' ministration he decides to become a lawyer—to try contested cases before the courts, and to settle disputes: he then calls into action another set of faculties, and in the course of ten years or more, he has parted with the ministerial look, and has taken on the expression of a shrewd, intellectual polemic. Or

suppose he becomes a sailor. His associations are changed, and instead of being surrounded by society, a wife, children, and friends, he becomes the captain of a ship, with a crew of rough hardy men, who face danger and death in countless storms, but he manages to ride out his time and take his place among the navigators—how different, his face as well as the life he lives, is the sea captain from the clergyman!”

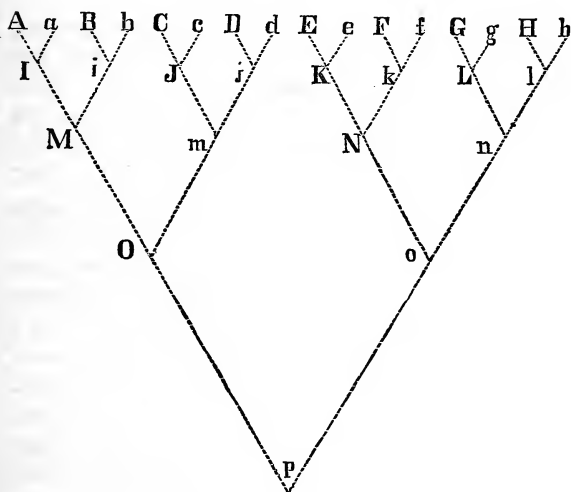
HAS THE MIND CONTOUR? DO THOUGHTS HAVE SHAPE?

(26.) Mind controls the features, and gives the expression of its character even in shape. Not only does the shape of the head, but also that of the whole body, correspond with the mental characteristics—even the walk, and every movement whatever, and every sound of the voice. The arm of Mr. P——, the horrid murderer, is preserved and on exhibition in one of our cities as an interesting exemplification of this fact. Even the handwriting has its figures or expression of character, though we may not be wise enough, by observation or instinctive tuition, to interpret it fully to our satisfaction. The almost universal observation of mankind upon the truths of phrenology and physiognomy, and upon the shape and feature of expression of all kinds of animals, corroborates these things. Even the pictured representations of angels and of demons, show emphatically the universal acceptance of these truths.

**WHY MARRIAGES OF CONSANGUINITY RESTRICT
VITAL RESOURCES.**

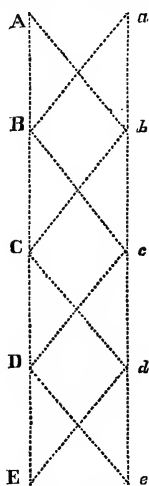
Vitality is a force which is progressive, working by laws, and having tendency even to repair the infractions of its own laws. To accomplish this, it makes available all the conditions within its reach, but within the limitations of laws, outside of which it does not act. Now, it is by law that mankind differ; and even a common parentage, and the law that like produces like, does not conflict with the fact that mankind differ, BECAUSE it is only under the same qualifying conditions that like produces like. The male children of two parents are not all alike; neither are the female children of two parents all alike. During different years the parents have been subjected to different qualifying influences; their occupations, their thoughts, their experiences, the quality of their food and drink, and their mode of living, and perhaps their place of residence, have not, in successive years, been entirely the same; therefore, their children cannot be all alike, though there will be general resemblances. Changed influences become impressions which enter into the qualities of the offspring, either directly, by operating on their parents, or indirectly, by their influence in calling into activity in the offspring peculiarities which existed in latency in the parents.—(See chapter on “Underground or Latent Peculiarities,” page 83.)

For progeny to be produced in successive uniformity when the parents are subjected to varied changing influences, would itself be in violation of the law that like produces like.



Now let us examine the above diagram, presenting parents, grandparents, great-grandparents, and so on. *P*, represents an individual whose parents are *O* and *o*, whose grandparents are *M*, *m*, *N* and *n*, whose great-grandparents are *I* *i*, *J* *j*, *K* *k*, *L* *l*, and whose great-great-grandparents are *A* *a*, *B* *b*, *C* *c*, *D* *d*, *E* *e*, *F* *f*, *G* *g*, *H* and *h*. It is plain that the individual *P*, inherits peculiarities from four grandparents, eight great-grandparents, and sixteen great-great-grandparents; and con-

sidering the varied conditions of life—the varieties of occupations, associations, habits, food and climate, which have their qualifying influences, and also, the underground or latent peculiarities, susceptible of becoming active in the progeny, it is plain that the resources of *P* to thrive upon inheritance are rather favorable, because nature is a force striving to maintain and progress. The vital powers of the progeny *P*, strive to take on by inheritance all the qualities of these progenitors that are vigorous and well balanced.



But let us consider this diagram, representing the successive marrying of brothers and sisters. There it is plain that *E*, can have only two grandparents, *C* and *c*, and only two great-grandparents, *B* and *b*, and only two great-great-grandparents, *A* and *a*. Now, after the conflicts of accidents and exposures, imprudences, toils, and poisonous influences, and whatever causes disease, it must be plain that the resources of healthful inheritance are very greatly restricted, limited, narrowed down, or whatever other term may be used to express the want of strength in the offspring. And if it should be objected that, suppose previous to *A*, *a*, there had been no intermarriages of relation, and that the vigor of many preceding progenitors may

have passed through *A*, *B*, *C*, and *D*, by the law of latency, down to *E*, the answer is appropriate, that the immediate inheritance from near ancestry, rather than remote, generally takes precedence.

The unfavorable effect upon the progeny from the intermarrying of relations is almost universally accepted as true. The law of Moses, as presented in the Book of Leviticus, defines the relationships within which marriage was not allowed.

“* Nearly all the Indians of North America were divided into clans, or, as they were called by the Algonkins, *totems*, the genealogies of which were scrupulously preserved in the *female* line. No person could marry in their own *totem*; and it was currently believed that if this rule was violated, serious physical consequences would result.”

Darwin, in his celebrated work on the Origin of Species by means of natural selection, says: “I have collected so large a body of facts showing, in accordance with the almost universal belief of breeders, that with animals and plants, a cross between different varieties, or between individuals of the same variety but of another strain, gives vigor and fertility to the offspring; and on the other hand, that close interbreeding diminishes vigor and fertility; that these facts alone incline me to believe that——,” ect.

But notwithstanding this almost universally accepted law, Dr. B——, of Berlin, in the December number of the *Journal für Kinderkrankheiten*,

* Medical and Surgical Reporter.

seems to take some exceptions to it. But his article appears to have some strange contradictions with itself. He says, (A.) "The relationship of the parents, no matter how near this may be, even to brother and sister, exerts in itself positively no injurious influence on the physical or mental character of the children; nor is it in the least a cause of sterility." He further says, (B.) "repeated marriages, generation after generation, between relations, have nevertheless the effect of developing the bodily or mental weaknesses of ancestors in their descendants, and in this respect, a crossing of blood becomes a necessity in order to avoid these weaknesses." And he says, (C.) "But *per contra*, just as these weaknesses are increased by such marriages, so are physical and mental advantages, such as muscular power, courage, business tact, energy, etc.; they are developed and become the rights of birth. And therefore, precisely these marriages are to be recommended, (es würde gerade, solche Ehen zu empfehlen sein), in order to keep the blood pure and improve the family."

In the above, (B.) and (C.), we have virtually two statements contradictory of each other. First, thus, (B.): By repeated marriages of relatives the bodily or mental weaknesses of their ancestors are developed in the descendants, leaving their bodily and mental energies in the back-ground, "under-ground" or latent. Secondly, thus, (C.): By repeated marriages of relatives, the bodily or mental energies of their ancestors are developed in the descendants, leaving their bodily or mental weak-

nesses in the background, "underground" or latent! Therefore, precisely, are his two statements in direct contradiction to each other.

Again, let us examine his first statement, quoted above, (A), that "marriage even of brothers and sisters positively exerts no injurious influence on the children. If this is *law*, then why may it not be law that the intermarriage of the children of these children, brothers and sisters, should positively exert no injurious influence, instead of, as he says, *then* developing the weaknesses of their ancestors, so that "the crossing of blood becomes a necessity in order to avoid these weaknesses?" Certainly it seems that if the second intermarriage of relatives proved decidedly injurious, the first intermarriage must have been somewhat so.

Now, it is well known that hereditary peculiarities, as a general rule in marriages not of consanguinity, show more in the children than in the grandchildren, though this is not always the case, for sometimes the peculiarity runs underground, or is latent in the child to appear in the grandchild, (see chapter on Latent Peculiarities, page 82.); and when the exception occurs it does not prove that the exception is the rule.

And when it does occur that a peculiarity, predominant in the grandparent and latent in the parent, becomes predominant in the child, it is not because it was in the second generation that it became predominant, but rather because the mental, moral and physical causes that influenced "anterior education," (see page 106), and its infancy an:

youth, (see pages 9 and 10), were more in similitude with those that caused such peculiarity to be predominant in the grandparent.

When it is observed, in any case, that the children of consanguine parents are in the first generation as healthy as their parents, this should not be at once interpreted as law, because the unfavorable influences resulting from such consanguinity happens to be in a state of latency in those children. Also, doth not the fact that successive intermarriages in consanguinity develop the weaknesses in an increasing ratio, prove that the more varied is our inheritance, conditions of health being equal, (the more plurality of personality that enters into the individual) the vigor, and power, and precision of effort become his inheritance.

Are not all nature's laws immutable, so that what we call exceptions to them are only *seeming* exceptions? Dr. B——, claims that certain families have married in and in for centuries, and that their members are now "remarkable for physical strength and good looks." Now, this is not a real but only a seeming exception to the law that marrying "in and in" is prejudicial to the offspring, as will doubtless be plain on examination. To be physically strong, and to have what may be called good looks, can exist without real brain-power; and in the above cases he does not claim anything in regard to brain power, (precision of intellection.)

But suppose they had equally as much brain-power also; even then, a positive and perhaps unanswerable explanation of such seeming exception

to the above stated law is this; as instance: suppose Mr. Chang-fee, resembling somewhat the Mongolian race, and Miss Plimply, resembling the European race, having marked contrasts in their mental and physical temperaments, should marry; and suppose some of their children, as is often the case, should resemble apparently their father altogether, and some their mother altogether, and all combination of resemblance in any one child to both parents being *latent* or "underground," so that they differ from each other apparently as much as their father and mother differ: Now, suppose a brother to the Mr. Chang-fee above mentioned, differing from him however, should marry a sister of the above-mentioned Miss Plimply, who also differed from her in temperament, talents, etc.; and suppose their children should differ in the same manner as their above-mentioned cousins, some taking on, for the most part, the varied peculiarities which have descended through their grandfather, and the others taking on, for the most part, the varied peculiarities that have descended through their grandmother; and suppose these cousins should intermarry, and from the above hereditary influences, and even *latent* peculiarities called into activity in the descendants, and others even *created*, by the qualifying influences of varied mental and physical occupations, habits, varied qualities of food, associations, thoughts, etc., if still there should be developed marked contrasts in their children—what then? They are all Chang-fee, are they not?

The marked contrasts in the ancestors, thus, together with influences of habit, etc., now cause all *consanguine* results to be *latent*, not appearing in the descendants before their varied habits, modes of life, climate, food, occupations, thoughts, associations, etc., have caused it to be *neutralized*, possibly forever.

Thus, these families by the name of Chang-fee, intermarrying, the consanguinity itself would only be a seeming one—it would not be real.

Dr. Gallard, author of *Nouveau Dictionnaire Sciences Medicales*, gives the mortality of children under seven at one in 6.40, and the mortality of children under seven, in marriages of consanguinity, at one in 8.10; and by some, this might be regarded as in favor of marriages of cousins. Yet, we ought to take into account that mankind generally seek others than relatives as partners, and also that they prefer to choose healthy partners, and that among relatives all bodily and mental imperfections are more apt to be known to each other, as also their bodily and mental perfections, and therefore, the marriages in the former case would be avoided, and not so much in the latter. Therefore, when marriages of relatives occur, it is more likely to be, as a general thing, when the parties possess vigorous health of body and mind, and its consequent good nature and genial attractiveness; because of which the children of such healthy cousins are not so likely to suffer as they would be if the selection had not such conditions in its favor.

Hence, we must conclude that Dr. Gallard's

statistics have no bearing at all in favor of the *general* marrying of cousins. And, precisely also, this same view of the case will itself reply to another Dr.—, who found that out of a thousand cases of consumption he had examined, in only six was there consanguinity of parents. It would have been some service to medical science, if he had therewith given information in regard to the consanguinity also of their grandparents and great-grandparents.



LATENT QUALITIES MAY BE AROUSED TO ACTION.

Vitality is a force that acts with intelligence. When our feet are so pinched that we cannot do our duties, this intelligence speaks to us by corns. When circulation is interrupted by ligated arteries, the circulation is re-established by other arteries becoming formed just where needed; being actually newly created by the vital force. The vital force resorts to all available means to accomplish its purpose. When there is an almost mortal contusion of the brain, so that the man is apparently killed, sometimes this vital force resorts to the *latent* physiological inheritance to sustain the patient, which inheritance, by its very latency, has not yet had the experiences of thoughts and deeds by which man realizes *duration* of life.

By the same blow that was almost death to the

experienced life, the latent part, the inexperienced life, has become aroused from its latency to vital progression—to living action. But when first aroused it is infantile in its mental experiences and expression. (See the case of George Nickern, page 17.)

In the same manner when the synchronous action of plural personalities has sustained customary precision of a mental entity, and upon that precision having been interrupted by a severe blow upon the head, it has afterward been restored by another blow. (See the case related by Louyer Villieramy, page 28.) Also, when there is impoverishment from a want of diversified personality, then sometimes a blow on the head revives a latent personality to action, so that in time it becomes experienced and synchronous in action with the existing one, and in this way cures idiocy. (See the case of Pope Clement XI, the case related by Dr. Prichard, and that of Father Mabillon, page 28.)

How truly do these cases corroborate the thesis which is the subject of this volume.

To utilize the knowledge of the plurality in personality, we should consider what has perhaps been sufficiently alluded to, and what has been observed by all people, that mankind differ greatly in their constitutions; and also the fact associated therewith, that the qualities of food, occupations, channels of thoughts, etc., which are most favorable to the health of the individual, also differ.

In the foregoing respects, individuals have a

plurality of inheritance from their many ancestors: and a special quality which exists *active* in the ancestry may be inherited *latent* in an individual descendant. In order to arouse a special inherited latent personality so as to become active, though possibly it might occur from a chanced and dangerous concussion of the head, (page 28,) or by the effort of nature, the individual should change his mode of life, in all respects, as far as possible, so as to conform to that mode which was the habit of his ancestor who possessed, not in latency but in action, that especial quality. Or this may be distinctly stated thus: If an individual has inherited a tendency to disease from only one parent, the other parent being vigorous, and if he becomes affected with disease from such inherited tendency, he should by all means, as far as possible, change his mode of life to conform to that of the early days of the healthy parent. He should change the mode of life as respects quality of food, drink, air, exercise, occupation, etc.; and it might be said, his entire habits, in order to make most available the latent inheritance which there may exist, at least in that degree which will exercise its remedial counteracting influence for health.

But suppose both parents should be weakly, and transmit weakness to the child, then the habits of the one so inheriting disease should be changed to conform to those of some vigorous one, as nearly as possible related in the line of ancestry. And if the inheritance of latent vigor which existed in action in an ancestor so far back in time that his

history is lost, it may be indicated in some uncle or aunt in whom the inheritance of that vigor may be active; and in such a case, the imitation, as far as occupations and habits are concerned, ought to be not so much those that the uncle or aunt were accustomed to, but rather such as seemed more agreeable to them, and to which their inclinations inclined; for indeed, the ancestors themselves may have been placed in a condition not conforming to that which was most suited to them, and yet not varying so much therefrom as actually to cause ill health.

The foregoing remarks become the explanation how it is that mankind differ so much in the possession of peculiarities that show their active tendencies either toward health or toward disease; for even *tendencies* to disease may be inherited, concerning which it may be well here to refer to the accepted authority of Prof. Watson, formerly of King's College, London, whose remarks are definite on this subject. "There are certain complaints which some have a tendency to and some have not. The tendency is sometimes strong and evident, sometimes feeble and faintly marked; sometimes it displays itself in the midst of circumstances the most favorable to health, sometimes it requires for its development conditions the most adverse and trying. To mention some of these diseases; scrofula * * * gout, mania, and (I believe I may add) spasmodic asthma. Not only is a disposition to these complaints strikingly pronounced in some persons, but other persons appear wholly free from

such a tendency; nay, even devoid of the susceptibility of them. Gout, in those capable of it, may be acquired by habits, as it may be prevented and repressed by the opposite habits. The habits that in certain persons bring it on, are the intemperate use of the luxuries of the table, and an indolent and sedentary life; but there are many people in whom no amount of rich living or idleness will generate gout; so there are some whom no exposure to impure air, cold, wet, and no privations—in other words, no appliance of the influences calculated to bring the strumous diathesis into play, will ever produce any form of scrofula, will ever render them consumptive, for instance, consumption being one of the most common and fatal shapes of scrofulous disease. There are many who, under the utmost distress and excitement of mind, never become insane. There are many who never become affected with asthma, although surrounded by the most powerful exciting causes to that complaint.” * * * * *

“But there is a singular caprice in asthmatic patients in this respect: some persons subject to the disorder, are unable to breathe in the thick, smoky atmosphere of London, require a high and clear situation, and respire easiest in the difficult air of the keen mountain top; others can nowhere breathe so comfortably as in low, moist places in some of the streets by the water-side in the city; for instance, a friend lived in New Market, a most exposed bleak spot, but if he left it and attempted to sleep in a strange place, he never was certain

that he should not be assailed in the night by his well-known enemy, (asthma); so that there were towns in which, after experiencing the effect of the atmosphere, he dared not sleep, and there were others in which he knew he might go to bed in security. It would have been difficult, I believe, to point out any essential difference between some of those localities; his lungs, however, formed an infallible eudiometer. Another college acquaintance of mine, (Wilson), much tormented by asthma, is equally sensible to these inscrutable influences. Two inns in Cambridge are named respectively the Red Lion and the Eagle; he can sleep in one of them and not in the other: nay, he is thus variously affected within much narrower limits. He assures me that when in Paris he never escapes a fit of asthma when he attempts to sleep in the back part of Meurice's Hotel, and never suffers when he sleeps in a front room. Dover Street suits him, Charles Street does not."

In the foregoing, Prof. Watson has recognized how greatly mankind differ in their constitutions; and it is often brought forcibly to our observation. Of two individuals, oftentimes the stronger one sickens and dies from some unhealthy influence or exposure which has little or no effect upon the other. And suppose these two individuals to be brothers, and therefore, having the same parentage, it would indicate that the *active* and the *latent* qualities existing in them by inheritance were different in each other to cause such difference in their tendencies to, or susceptibilities of, a special

disease. And of two individuals, possessing equal health and vigor, one will more readily, under the same influence, contract one kind of disease, and the other another kind; also, the asthmatic patients, as above mentioned, who were so differently affected by different localities that showed no recognizable difference in unsalutary influences, indicate how apparently slight is the change required for some persons to inhale an atmosphere which, to them, in the one case is life, and in the other is death.

Let us now draw nearer to an interesting view of plural personality, and consider the case of the Rev. J. E—, (pp. 25 & 26), who from a concussion of the brain lost all his knowledge—returned mentally to the condition of an intelligent child, and after learning again from tutors for several months, things which, though learned before, had become lost to him, after awhile “the rich storehouses of memory were gradually unlocked, so that in a few weeks his mind resumed its wonted vigor.” He was possessed with plural personality; the one which had been active in his younger days had become passive to give place to another, doubtless, a more intellectual one, which, by his studies, had become aroused from its latency to activity, but from the concussion the former one had become active, and the latter passive, until, by intellectual exertion *of the same kind as before*, it had become aroused again to activity.

The case immediately following this, (on pages 26 and 27,) of a gentleman thirty years old, who, after a severe sickness, lost the recollection of every thing,

even the names of the most common objects, and began again, his health being restored, to acquire knowledge like a child, and after he began to learn Latin, etc., is very important in illustrating this subject. After making considerable progress in his Latin, when reciting to his teacher he stopped suddenly and put his hand to his head, feeling a peculiar sensation, and informed his teacher that it appeared to him that he knew all this before; and from that time he rapidly recovered his faculties; that is, he became as he had been before his sickness, with his acquirements and memories. Now, suppose in this case he had, in his acquired infantile state, been taken to another country to live—for instance, to the country where one of his ancestors had lived whom he mostly resembled, not in mental power but in mental qualities, as near as those could be determined in his new infantile state; and suppose also, that instead of learning the same branches of study that he had formerly learned, his mind had been directed altogether in another channel of study or occupation, such as, for instance, conformed to that of the ancestor from whom he had inherited the personality which by sickness had been aroused to activity—what then? He would have lived another life; he would have been the other being; he would probably never afterward have recollected any of his Latin, or any circumstance of his former life, and he would have been a younger man; for that personality, which had existed in a state of latency or passiveness for thirty years, had not grown old by

the experiences of activity. But it would be rather an extraordinary *chance* for one in such a condition to be removed to another country, to have altogether different scenes and experiences of life, since no attention heretofore has been called to such possibilities, and it would be far more probable that his friends would keep him in the same place, and that he would be submitted to the same experiences, and have the same studies to pursue as in his former life, and hence would be most likely to recover his former personality. Are not these things true?

Again, on page twenty-seven there is another case, a very important one, illustrating plural personality—the case of a lady who from sickness was reduced to a state of great weakness and a remarkable failure of memory. And what says the record in regard to that loss of memory? She forgot twelve years of her life, *and those twelve years were the time she had lived in Edinburg*, having formerly lived in another city. This case shows, that by going to Edinburg, and having the scenes and mode of living changed, she had developed there more exclusively a special personality, (which before had, doubtless, been associated in action with another one, if on going to Edinburg she had not become very idiosyncratic,) but that distinct personality was more especially attacked by the disease, so that it lost its power both of body and mind. She recovered her health, the account says, “but remained in a state of imbecility, resembling the dotage of old age!” If this lady, after the re-

covery of her health, had been taken back to Edinburgh and placed in the same house, with precisely the same qualities of food, and surroundings, and occupations as far as possible, doubtless she would also have recovered the condition she was in when she resided there. Or, instead of that, if it had been known of whom, in the line of ancestry, she had inherited the personality which she still retained in a somewhat active condition, and had been taken to the place where that ancestor resided, and been subjected to the same kind of experiences which were most congenial and salutary to that ancestor, she would without doubt have experienced the invigoration of her mental power also, unless, from the surrendering one personality by disease, there was in this case so much impoverishment of the other, by its existing in entire unity, as to approach a state of idiocy.

Are these not the true explanations of phenomena that have heretofore been considered unexplainable? The case of a man is presented, (see page 14), who had received an injury of the head, and on his convalescence he spoke the Welsh language, which was the language of his youth, and which he had entirely lost. In remarking upon this, Prof. Combe, states that "the manner in which such an effect is produced is entirely unknown. Old people, when feeble, often relapse into the *dialect* of their youth."

It seems a proper explanation to consider that they have cultivated another personality by removing from the associations of their youth, and

changing almost all their entire habits; and when this personality is nearly worn out, and becomes passive, then the other personality, which was cultivated in youth, manifests the peculiarities of its own sphere of cultivation. And doubtless, too, this relapsing into the "*dialect of their youth*" will be found to occur oftener when the individual has returned in his age again to the place where he lived in youthful days, breathing the same air, drinking the same water, viewing the same scenes, etc., all which would exert their influence to revive to a degree the personality which was active to be impressed and receive character from the experiences of his earlier life. But the change must not be one of a minor degree, especially if it is desired to arouse an absolutely latent personality; it should extend to almost all the surroundings and influences of his life, and should also be of a character which, if not at first, his desires would soon find congenial.

It is by these laws that a more youthful, or more vigorous constitution may be revived or called up from its latency to action; or, if not absolutely so, yet sufficiently to exercise the influence of its sustaining power.

There are frequent cases of youthful vigor in elderly and aged people.—Case of lactation in a woman sixty years old, by which she nursed a grandchild two months old whose mother had died.—*Medical and Surgical Reporter*.

But also, let it be remembered, the influences that would call to activity a latent feeble person-

ality ought to be avoided, for indeed, by this same law, a feeble personality, or one having a tendency to disease, may be revived as well as a vigorous one, under the influences tending to such a result. Then, avoid the places as a residence as well as the habits and channels of thought which were customary with unhealthy or feeble ancestors and blood relations.

And here may properly be quoted the terse remarks of Prof. Draper, though applied to other varied phenomena. "Organisms of every kind, so far as presenting any resistance to change, are impressed without any difficulty by every exterior condition. The only things which are absolutely unchangeable are the laws of nature; everything else is to be looked upon as an effect, or as a *changeable phenomena*, arising from the operation of those laws."—(Note also the bearing of the chapters on "Appetency," and "Influence of the Mind.")

Just now has come to hand No. I, of Vol. XXI, of the *Medical and Surgical Reporter*, July 3d, 1869, and on turning its leaves, the following is presented on page 23. "A female child with two heads, was born a few days ago at Zerbst. A careful examination has shown that the spinal column is divided into two at the first of the true vertebræ, and that from this point *two perfectly* developed necks and heads proceed. The breast is half as broad again as is usual, the limbs simple and well formed. We have not yet heard in how far the internal construction of the breast is simple or complex." These cases should not be called

monsters, if that term conveys any meaning at all repulsive to the most æsthetic choice of genial thought; for it becomes a very interesting and beautiful illustration that absolute plurality of personality of an individual is not only possible but may be the rule, while the separation of the two in a part of the individual, showing two visible heads, or two visible pelves, etc., is simply the exception to the rule which locates the bodies entirely within each other.

It should not be supposed that in any case the author would advise the imitation of the vices of a relative whose quality of personality, as far as bodily health is concerned, it is desirable to revive from latency to activity in one's self. All vices have their destructive tendencies, and may destroy the individual whose health seemed a model of excellence; besides, it should be considered that even those whose vices seem prominent, have generally their principal thoughts occupied in active and useful pursuits. The intemperate have in their sober hours, as a general thing, some useful work to do which engages the most of their attention. Besides, the intemperate man may have double personality, one of which would be more distinctly active during intoxication, and the other during his sober hours. (See the case of the Irish porter, page 16.) The vice of dishonesty, even when appearing prominent in an individual, doubtless has but a very little of thought given to it, while almost the entire amount of mental effort is given to some useful industry: and because it is LAW in the

social nature of man that there is right and there is wrong, doubtless, all who seem to be impelled, or are persuaded to wrong-doing, have an almost infinite longing to possess the power to overcome the inclination, or the temptation, and in that manner to be free from its consequences.

There is a great want existing in the composition of the individual who is a thief by profession from the love of it; and if it is merely from the desire of gain, then there is a great lack of the activity of the powers of reason in regard to the true natural social laws of man; and also, a lack of observation as to the fact that it leads to pecuniary impoverishment and degradation of the being whom we call human and humane.

So, also, he who is ready to abandon reason whenever any whimsical vapor floats upon his mind, names itself progress, and with false tongue tells him to abandon wife and home, and that he has liberty to be changeable in his marital affections, shows that he has not observed that all who follow such teaching, in a very short time, in a very few years, find that it yields only unhappiness. With eyes open, he fails to see the sublimer way of the pair who walk together, with affection growing still stronger with age, till the sun of their life sets peaceful and serene.

However much we need to change our qualities of food, occupations, and general associations, etc., there is abundant room for those changes, all conforming to virtue and honor. And as man needs but one and the same sun to give the light to his

days throughout his entire life, though sometimes that sun is nearer, and sometimes farther, sometimes shining with clear face, and sometimes obscured by clouds, even so does man need but one earthly, constant and confiding friend to illumine and cheer the pathway of his life.

He who does not observe these facts, which surely seem to be placed to the observation of all people, certainly must be so greatly wanting in the essential elements of wisdom, that his teachings and examples would be unsafe to follow, and should be avoided by all people.

Plurality of personality of the individual has its great uses: there is greater brain-power; there is more brain surface by means of a greater number of convolutions; there is greater precision of thought, by the different persons (united) having different qualities of mind, so as to observe the same subject, as it were, from different stand-points.

One so qualified, is more liberal in his views on religious or denominational theories; and seeing from different stand-points, he can recognize more clearly the various relations of truths and errors entertained by the different religious sects. And if the plural personalities of the individual act synchronously, he does not vacillate and change his opinions often, though he might appear to do so in presenting the various features of a subject. But if those plural personalities do not act synchronously but alternately, one at one time, and another at another, then we should expect, as we

frequently find to be the case, the individual changes his opinions, so that we may not at any time know what view of a subject he will favor, or what course he will be likely to take in any enterprise. Yet, even one acting so vaguely at different times, will on some important occasions act with especial propriety, and exhibit an unexpected greatness of intellect and character, because then his different personalities act synchronously and with precision.

Multitudes of facts will corroborate the truth of plural personality. We observe that children as they grow to manhood and womanhood, sometimes change, not only their features, but also their tastes for certain kinds of food—their likes and dislikes in almost everything—take on a stronger or a feebler constitution; change their character, etc., so as to appear like another person.

In these cases, one personality, from disuse of its faculties, becomes more latent, and another from use of its faculties becomes more active. And even as twins are sometimes though seldom of the opposite sex, so do these personalities sometimes partake, one of the masculine, and another of the feminine element. The *Medical Gazette* quotes from a non-medical source the case of a young lady who married, had a child, and then commenced to manifest whiskers, a rough voice, “and other more indisputable physical changes of sex.”

The *New York Tribune*, of July 14th, 1869, has the following among its scientific notes. A correspondent of the *American Naturalist* states that a doe was recently shot near Minneapolis, Minn.,

carrying a beautiful pair of antlers, each with four branches, and asks whether this is a new fact in natural history, or not? To which the editors reply, that they have never heard of a female deer assuming the character of a male before. But it is a well established fact, that female birds living to old age, often assume the plumage, and, to a certain extent, the habits of the male. In the Museum of the Peabody Academy of Science, at Salem, Mass., there is a pea-hen that in the spring before her death, at the age of nineteen years, changed her dull female plumage for the bright plumage and full tail of the male bird. N. Vickery, taxidermist of Lynn, Mass., had the specimen mounted."

Cases of hermaphrodism are wonderful illustrations of plural personalities of the male and the female element being enclosed in the same body.

When the orator's features assume a more than ordinary glow of intelligence, and by a seeming inspiration of thought and language, he presents to us new images of great beauty and truth, his power results from the plural personality of which he is possessed, all being revived to synchronous action, and to a precision of thought which is its consequence. And why should there not be precision of thought upon a subject from plural personalities acting synchronously, as well as precision of vision by viewing an object with two eyes somewhat different, and located to view the object from different positions? Are objects of vision more important than subjects of contemplation? Certain-

ly not, for the vision is more able to recognize exact forms of all things, than the mind is to recognize every feature of a subject, to acquire absolute truth. Therefore, there is the greater need of plural personalities to search out truth, than there is of two eyes to know the exact form of an object.

In making available the plural personalities for the conservation of health and long life, the author should not be supposed to have any lack of regard for all other means of restoration. All other remedial means, such as proper medicines, electricity when appropriate, etc., have their own powers to assist nature, or rather to be the vehicle through which nature carries on restorative processes; also, all the laws of mind and body, as presented under various heads, though, perhaps, from the order of presentment, seeming as not greatly appertaining to the subject, will, nevertheless, press forward for recognition by the scrutinizing mind, as laws that are advantageous to be used in making avail of any and all remedial agents.

PLURAL PERSONALITIES.

In another part of this volume attention has been called to the fact that, sometimes the mind will wander altogether from the subject of a printed page to other subjects, even while the eye continues to read line after line, and perhaps a page or more, when the mind returns to the subject, only to find the eye reading much farther along in the contents of the work where the mind has not followed, and knows nothing at all of the subject. Even more extraordinary than this is the fact which may here be mentioned. Some persons, at times, while copying a manuscript or printed page, not only will read the lines, but also will copy them correctly, while the mind has wandered entirely away to some other subject for a brief period or longer. In these cases the eye and hand obey one personality, while the other personality is unconscious of this because its mental attention is directed entirely away. Sometimes, also, the mental attention of both personalities show manifest comprehensive and combined action, and each with united recognition of the other, as when an individual holds conversation on different subjects with two persons at the same time. Though the tongue cannot answer or reply to both synchronously, yet the mind, in its plurality of action, comprehends two speakers at the same time, and gives reply to one and then to the other.

There are many people who experience this comprehensive synchronous mental action.

The case above mentioned, where the hand and eye copies while the entire *recognized* mental action is directed to some other subject, appears to the author to be *in part* a key to the phenomena of planchette. And the "*in part a key*" may properly have emphasis, because other natural laws come in to complete the *key* and explain this phenomenon. And those other natural laws are nothing more than those of animal magnetism and psychology, which, when manifested in great degrees, is called clairvoyance. Before explaining fully how the marvels of planchette are accomplished, the author would say a few words only on this correlation of the vital forces, and on psychology, or mesmerism, and allude to an astonishing phenomenon recognized in standard works on entomology.

Bring a female Kentish Glory Moth from the chrysalis, and take her immediately in a closed box out into her native woods, and in a very short time will arrive a company of male "Glories," and light upon or hover about the prison-house of the coveted maiden, where, without this magic attraction, you might walk a whole day without seeing a single one, the Kentish Glory being generally reputed to be a very rare moth; but as many as one hundred and twenty male Glories have been thus decoyed to their capture in a few hours by the charms of a couple of lady Glories shut up in a box. This exemplifies a great power of animal magnetism or clairvoyance by which they know

both the location and condition of one of their own race at a distance of more than a mile, and the sides of a wooden box intervening.

“Correlation of Forces” is a fact accepted in science in its application to motion, heat, light and electricity, meaning that those forces are convertible one into another. May not the term *correlation of forces* be very properly applied to vital phenomena? When the vital force is moving muscle and brain, it cannot equally, at the same time, restore the waste of muscle and brain ; also, when this same vital force is restoring muscular and brain exhaustion, it cannot at the same time equally support muscular and brain activity ; therefore the necessity of rest of body and mind at night for restoration from the waste by muscular and brain action during the day. The vital force cannot act so powerfully in its ways and means to digest food when the mind is intensely active, nor is one arm so powerful to lift a weight while the other arm is likewise lifting.

It is because of the correlation of the vital forces that the assimilation of digested food goes on best while the mind is passive.

Now, suppose in a case of *active* plural personalities of an individual, those personalities act synchronously and communicatively but not both mentally, for, suppose that the vital power of the individual is sufficient to support only the psychological action of one personality and not its mental, and support the mental action of the other personality and not its psychological, then, from

the above stated laws, the following facts would scarcely seem to be strange :

In the plural personalities of an individual, one of those personalities may predominate in its psychological powers, with scarcely any mental, and the other may predominate in its mental powers with scarcely any psychological; and the psychological personality may become acquainted with conditions and circumstances, with the nature of their progressive action, and may transfer this knowledge *directly* to the mental personality when they act unitedly, and so produce what is called *presentiment*, which is a consciousness of what is to be without being able to recognize sufficient reasons for this mental recognition. For instance, an individual has been exposed to the poison of typhus fever, but before it brings on the disease his psychological personality recognizes that the amount of exposure and the condition of his system will cause death, and the psychological personality transfers the knowledge of this ultimate consequence directly to the mental personality and he recognizes it in the manner called presentiment.

The psychological personality of one individual may also gain knowledge from or through the mental and psychological personalities of other individuals, and likewise transfer it to the mental personality, so that the individual gains presentimental knowledge of various circumstances and affairs. Most people recognize the truth of presentiment, and the above seems to the author to afford a reasonable explanation.

But does not the psychological personality ever transfer its knowledge by a less direct means than by *conjoined action* with the mental personality which gives rise to presentiment? And if the manifestations of planchette and similar phenomena are not fictitious, is it not by them that the psychological personality, not then acting conjointly with the mental, transfers its knowledge by writing, moving the hands of an individual by the agency of its own sets of nerves, so that the mental personality of the individual does not recognize that they are the hands of its own body also, that are thus moved, though the board appears to move itself, or to be moved by an outward unknown power.

The author has taken no special interest in planchette or kindred phenomena as regards the supposition of their dealings with disembodied spirits or unnatural agencies, and believes that such phenomenon simply echoes through psychological personalities the thoughts, imaginations, wishes, hopes, fears, etc., of the embodied personalities concerned in being the agents and subjects of its operations. This, at least, appears to the author to be not beyond the province of the laws that exist in the mental, physiological and psychological constitution of man.

The fact (see anatomical phenomenon), of two heads having one body, and each head, or mental personality, using that body, shows plainly that distinct personalities, mental or psychological, contained within one skull may do the same thing.

The term "psychological personality" used in the preceding pages, is not intended to comprehend an entire personality, but only a part, the other part of the same personality being mental; and of two personalities of an individual, each one may have its psychological powers, and also its mental



powers; or one may manifest mostly or solely psychological powers, and the other mostly or solely mental, having varied degrees in this respect.

Although these two powers of *one personality*, may of themselves afford explanation of many

strange phenomena, yet there is much that is better accounted for through the plurality of personalities, with each possessing one or both of these powers.

When one personality exists with predominant physical and psychological powers, and the other with predominant mental, the features will show these characteristics.

The portrait on the preceding page shows great powers of endurance, but the mental individuality will not always manifest precision in its views of the various features of a subject, because the plural personalities have not at all times synchronous mental action. The comprehensiveness of his mind should not be expected to be always uniform, for only on those occasions which require the exercise of more than ordinary intellectual comprehensive scrutiny will the reserved power come to his aid.

In the features of the late John A. Roebling, plural personalities show to a degree their combined intellectual expression.

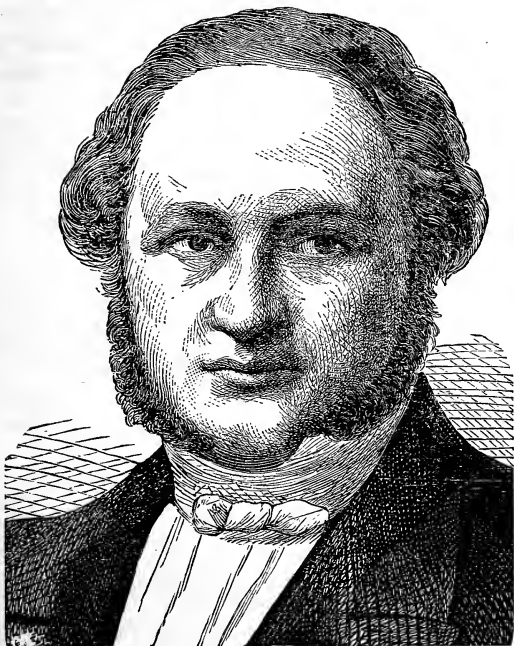
The following cut is a faithful portrait of Mr. Roebling, one of the most skillful engineers of the age. He constructed the suspension aqueduct over the Alleghany River at Pittsburg, the Monongahela Suspension Bridge, a series of suspension aqueducts on the line of the Delaware and Hudson Canal, the great Railroad Suspension Bridge across Niagara, the great Cincinnati Bridge, whose span is 1030 feet. The last great work on which he was engaged up to the time of his death was the East River Bridge. He had prepared all the plans,

and made most of the arrangements for its construction at the time of his death, which resulted indirectly from his foot having been crushed between a cross-beam of the dock and a float which was entering the slip.



JOHN A. ROEBLING.

Besides the foregoing, Mr. Roebling engaged successfully in several other extensive engineering enterprises, for which he was well fitted by his active and comprehensive intellectual capabilities.



The above is a faithful portraiture of M. Eugene Rouher, Senator, late Minister of State, Minister of Finance, Grand Cross of the Legion of Honor, of the Orders of Leopold, the Black Eagle of Prussia, the Oak, St. Maurice, and St. Lazarus, etc. Plural mental personality and its power is strikingly shown in his features, which exhibit great capacity for intellectual work, having effective

precision. Account says of him, (*Harper's Weekly*,) that "his early political connections, if he had any, which appears doubtful, seem to have sympathized with Orleanism." Now it is not probable that a man with such a feature would express early political convictions, for in his comprehensive conceptions he would comprehend that there is some right and reason in all parties, and would wait for sufficient developments before he would definitely show his preferences.

"He concluded his collegiate studies at Clermont; graduated at law, in which he acquired a good repute. He was elected a representative after the Revolution of 1848. Louis Napoleon, after his election to the Presidency, appointed M. Rouher Minister of Justice, and from this period his aptitudes for parliamentary contention were established. In January 26, 1852, he was appointed Vice President of the Council of State, and was charged with the administration of the section of Legislation, Justice and Foreign Affairs. In this new sphere of action his characteristic talents and capacity for real work manifested themselves in a conspicuous manner. M. Rouher was successively President of the Commission of Pensions to aged persons, member of Commission charged to distribute eight millions of francs in execution of the testamentary deposition of the Emperor Napoleon, and member of the Commission of the Universal Exposition of 1855. On the 3d of February in that year, he accepted the portfolio of Agriculture, Commerce and Public Works. Under his ad-

ministration immense reforms have been accomplished ; public works and improvements of every kind have been carried out all over the country.

“In conjunction with Baroche he negotiated with Mr. Cobden the commercial treaty between France and England, which was signed on the 23d of January, 1860. The unexampled impetus given to the French trade by the treaty, has opened up prospects of prosperity far beyond the most sanguine expectations. Since 1860 he has negotiated the commercial treaties of France with Belgium, Prussia, the Zollverein and Italy, all based on the same enlightened and liberal principles.

“In 1863, M. Rouher passed from the Ministry of Commerce to the Presidency of the Council of State. Toward the close of the year he replaced, *ad interim*, M. Boudet as Minister of the Interior. On the death of M. Billaut, Rouher succeeded him in the Premiership. This position he has been compelled recently to resign, owing to the pressure of the Third Party in the Corps Legislatif. He has been called to the Presidency of the French Senate. M. Rouher may justly be ranked among the great orators who have adorned the deliberative assemblies of France.”—*Harper's Weekly*.

The philosophy of the great intellectual power of M. Rouher is what we see in the features, the synchronous action of two minds. Even as two eyes can view an object and make it more distinct by combining the different effect on the different eyes, even so, he could view a subject with his plural minds, and comprehending the various bear-

ings, correct conclusions in regard to expediency would come to him almost without effort. But how, it may be asked, can mental action of plural personalities be manifest to an observer through the expression of the features? It is in the same way that the two eyes in viewing an object actually see, (because of the two angles of vision,) two different forms of the one object, which two forms occupy the same place, as the mind apprehends them through the vision ; and this gives more vivid outlines to all its parts, and the idea of solidity ; also to a landscape it shows the perspective clearly. Even so, when the mental expressions of two or more personalities are pictured in one countenance, there is more vividness of the feature,—a something not easily described, which is the impress of intellectual comprehensive power.

APPENDIX.

The instance of "double consciousness," of which Miss R—— was the subject, as presented on pages 11 and 12, is given more fully in an article furnished by Rev. Wm. S. Plumer, D.D., and published in the May number of *Harpur's Magazine* of 1860. As many very interesting features of her case give additional corroborative evidence of plural personalities of individuals, the author will here quote it in full; and will also, by annotations, endeavor to show the points and bearings of the phenomena which this case exhibits.

"For many years brief and meagre accounts of the remarkable case of Mary Reynolds have appeared in various quarters. In 1815 Major Elicott, Professor of Mathematics in the United States Military Academy at West Point, a relative of Miss Reynolds, communicated some of the facts of the case to the late Dr. Mitchell, of New York, by whom they were published in the *Medical Repository*. This statement is quoted by Professor Upham in his work on 'Disordered Mental Action.' A further notice of the case appeared in the *Alleghany Magazine*. The late Archibald Alexander, D.D., many years later became interested in the subject, and secured materials for a full statement, which he proposed to place in the hands of Professor Henry, to be communicated to the American Philosophical Society. But the death of Dr. Alexander prevented the execution of this design. Dr. Wayland, in a note to the later editions of his 'Intellectual Philosophy,' refers to this case as 'more remarkable than any that he had met with elsewhere,' and copies a considerable part of the statement of the subject herself, other portions of which I am enabled to give. All the accessible details of a case so

singular should be placed upon permanent record. The following statement, which is more full and complete than any which has heretofore been prepared, embodies, I believe, all that can now be known in relation to it. The venerable Mr. John Reynolds, who is honored by all who know him, the brother of Mary, and his son, the Rev. John V. Reynolds, D.D., of Meadville, Pennsylvania, in whose family the last years of her life were passed, will vouch for the minute accuracy of all that is here stated. Many others who are still living will testify to the general truthfulness of the statements which follow.

“Toward the close of the last century William Reynolds, with his family, emigrated from England to America. He belonged to the Baptist denomination, and was an intimate friend of Robert Hall and other distinguished Dissenters, and in after years his house, in what was then the ‘Far West,’ became a ‘stopping-place’ for the pioneer missionaries in their laborious excursions into the wilderness.

“William Reynolds, leaving the remainder of his family in New York, took his son John, a lad of fourteen years, and set out to find a new home. They pitched upon a spot in Venango County, in Western Pennsylvania, between Franklin and what is now known as Titusville—twelve miles from the former, and six from the latter. The whole surrounding country was an unbroken wilderness; the nearest white neighbors being, as far as he knew, the few inhabitants of Franklin on the one side, and Jonathan Titus, the proprietor of the land on which Titusville now stands, on the other.

“Here, in the unbroken wilderness, William Reynolds and his young son built a log-cabin, in which the father left the lad while he returned to New York to bring the remainder of the family to their new home. For four months the boy remained alone in the cabin, rarely seeing the face of a white man, but being frequently visited by Indians. In due time the Reynolds family were reunited in their new Western home.

"Of this family was a daughter, Mary Reynolds. She was born in England, and was a child when brought to America. Her childhood and youth appear to have been marked by no extraordinary incidents. 'She possessed an excellent capacity,' says her kinsman, Professor Elicott, 'and enjoyed fair opportunities to acquire knowledge. Besides the domestic arts and social attainments, she had improved her mind by reading and conversation. Her memory was capacious, and well stored with a copious stock of ideas.' Though in no respect brilliant, she seems to have been naturally endowed with an uncommonly well-balanced organization, physical, mental, and moral.

"When she had reached about eighteen years of age she became subject to occasional attacks of 'fits.' Of the exciting cause and precise character of these no reliable information can be attained; for the new country in which she resided contained no physician competent to form a correct diagnosis of her case. An acute physiologist, taking account of the time when these attacks first appeared, and that of their final disappearance, would form an opinion as to their immediate physical cause.

"On Sunday, in the spring of 1811, when she was about nineteen years of age, she had an attack of unusual severity. She had taken a book and gone into the fields, at some distance from the house, that she might read in quiet. She was found lying in a state of utter insensibility. When she recovered her consciousness she was blind and deaf, and continued in this state for five or six weeks. The sense of hearing returned suddenly and entirely; that of sight more gradually, but in the end perfectly.

(A) "About three months after this attack, when she had apparently nearly recovered her usual health, though still somewhat feeble, she was found one morning, long after her usual hour of rising, in a profound sleep, from which it was impossible to arouse her. After some hours she awoke, but had lost all recollection of her former life. All the knowledge which she had acquired had passed away from her. She knew neither father nor mother, brothers

nor sisters. She was ignorant of the use of the most familiar implements, and of the commonest details of everyday life. She had not the slightest consciousness that she had ever existed previous to the moment in which she awoke from that mysterious slumber. As far as all acquired knowledge was concerned, her condition was precisely that of a new-born infant. All of the past that remained to her was the faculty of pronouncing a few words; and this seems to have been as purely instinctive as the wailings of an infant, for the words which she uttered were connected with no ideas in her mind. Until she was taught their significance they were unmeaning sounds to her.

(B) "But in this state she differed from an infant in this, that her faculty of acquiring knowledge was that of a person in the possession of mature intellect, fully capable of dealing at once with the facts of existence. She therefore rapidly acquired a knowledge of the world into which she had, as it were, been so mysteriously re-born.

"She continued in this state for about five weeks, when one morning she again awoke in her natural state, without any intimation from memory or consciousness that any thing unusual had happened to her. The five weeks that she had passed in her abnormal state were to her as though they had never been. All the knowledge and experience which had been so strangely lost were as strangely restored; and she took up life again at the precise point where she had left it when she fell into that slumber from which she had awoke to the new life. She was surprised at the change of the season and the different arrangements of the things around her, which seemed to her to have been wrought in a single night. Her friends rejoiced as if they had received her back from the dead, fondly trusting that her restoration would be permanent, and that the extraordinary occurrences of that mysterious five weeks would never be repeated. But their anticipations were not to be realized.

"After the lapse of a few weeks she again fell into a pro-

found slumber, from which she awoke in her second state, taking up her new life again precisely where she had left it when she before passed from that state. The whole previous life of which memory or consciousness remained was comprised in the limits of the five weeks which she had passed in this state. Her knowledge was confined within the narrow limits of what she had then acquired.

"These alternations from one state to the other continued for fifteen or sixteen years, but finally ceased when she had attained the age of thirty-five or thirty-six, leaving her permanently in her second state, in which she remained without change for the last quarter of a century of her life.

"In 1836, after these changes had wholly ceased, she wrote at the request of her nephew, Rev. John V. Reynolds, D. D., of whose family she was then an inmate, a statement of some of the facts of her remarkable experience. As she was then in her 'second state,' in which she had no recollection of the feelings or incidents of her other state, she relied upon the testimony of her friends for the circumstances related concerning the 'first state.' She says:

"'From the spring of 1811, when the first change occurred, until within eight or ten years, frequently changing from my first to my second, and from my second to my first state, I was more than three-fourths of my time in my second state. There was not any regularity as to the length of time that the one or the other continued. Sometimes I remained several months, sometimes only a few weeks, or even days, in my second state; but in no instance did I continue more than twenty days in my first state. The transitions from one to the other always took place during sleep. In passing from my second to my first state nothing special was noticeable in the character of my sleep. But in passing from my first to my second state my sleep was so profound that no one could awake me, and it not unfrequently continued eighteen or twenty hours.

“Whatever knowledge I acquired in my second state became familiar to me in that state, and I made such proficiency that I became well acquainted with things, and was, in general, as intelligent in that as in my first state.

“My mental sufferings in the near prospect of the transition from either state to the other, but particularly from the first to the second (for I commonly had a presentiment of the change for a short time before it took place), were very great, for I feared I might never revert so as to know again in this world, as I then knew them, those who were dear to me. My feelings, in this respect, were not unlike those of one about to be separated from loved ones by death. During the earlier stages of my disease I had no idea, while in my second state, of employing my time in any thing useful. I cared for nothing but to ramble about, and never tired walking through the fields and woods. I ate and slept very little. Sometimes for two or three consecutive days and nights I would neither eat nor sleep. I would often conceive prejudices, without cause, against my best friends. These feelings, however, began gradually to wear away, and eventually quite disappeared.’

“The two lives which Mary Reynolds lived for many years were thus entirely separate. Each was complete in itself, the fragments of which it was composed, though in reality separated by the portions of the other life intervening, succeeded each other in uninterrupted succession, as far as the evidence of her own memory or consciousness was concerned. The thoughts and feelings, the knowledge and experience, the joys and sorrows, the likes and dislikes of the one state did not in any way influence or modify those of the other. (C) But not only were the two lives entirely separate, but her character and habits in the two states were wholly different. In her first state she was quiet and sedate, sober and pensive, *almost to melancholy, with an intellect sound though rather slow in its operations*, and apparently singularly destitute of the imaginative faculty. In her second state she was gay and cheerful, *extravagantly fond of society, of fun and practical jokes, with a*

lively fancy and a strong propensity for versification and rhyming, though some of her poetical productions appear to have possessed merit of a high order. The difference in her character in the two states was manifested in almost every act and habit. (D) *Her handwriting in the one state differed wholly from that of the other.* In her natural state the strange double life which she led was the cause of great unhappiness. She looked upon it as a severe affliction from the hand of Providence, and dreaded a relapse into the opposite state, fearing that she might never recover from it, and so might never again in this life know the friends of her youth, nor her parents, the guardians of her childhood. She had a great desire to retain a knowledge and memory of them. But in her abnormal state, though the prospect of changing into her natural state was far from being pleasant to her, yet it was for quite different reasons. She looked upon it as passing from a bright and joyous into a dull and stupid phase of life. Yet to her it was often a source of merriment, and the occasion of frequent humorous deceptions practiced upon her friends.

“Having given a general outline of the facts of this singular case, I will now detail such separate incidents as I have been able to collect.

“At the time of her first change her brother John was a permanent inhabitant of Meadville. Hearing of her remarkable change he visited her at the old homestead. Of course she did not recognize him. But having been told of his relationship to her, she soon became warmly attached to him, and her affection grew as he repeated his visits during her continuance in her second state.

“In her second state she had strong feelings of fondness or of dislike to persons. During the early part of her change to an unnatural state her friends found it necessary to keep a watchful eye upon her, and often to put restraint upon her movements. This restraint was never that of physical force, but consisted in prohibitory commands. This excited her displeasure, so that for some time she af-

fects to believe that those about her were not her relatives, as they affirmed that they were.

"She became very anxious to visit her brother in Meadville, but her friends did not think it advisable to give her permission. Between one and two years after the first change, and while in her second state, she left home on horseback—an exercise of which she was very fond, and in which she was freely indulged—under pretense of visiting a neighbor. She made the visit—for she always carefully kept the letter of her word, though not always the spirit—but she made her visit very brief, and then rode on to Meadville, a distance of nearly *thirty* miles. Her family soon learned where she had gone, and allowed her to remain some weeks. During that time she was a guest of Mrs. Kennedy, whose husband, Dr. Kennedy, had recently died. At the same time a young lady, Miss Nancy Dewey, was a guest in the same family. Between her and Mary Reynolds a strong friendship sprang up. One night they agreed together to play off a practical joke on Mr. John Reynolds, who was boarding at the same house. But it happened that neither of the young ladies awoke at the right time, and when Mary awoke in the morning she had changed to her natural state.

"She now found herself in a strange house, for she had never been in Meadville in her natural state. She had for a sleeping companion a person who was a total stranger. She saw nothing with which she was familiar, and could not imagine where she was. Being in her natural state quiet and reserved, and even shy, she asked no questions. Miss Dewey spoke of the trick which they had proposed to play but had not awaked to perform. Miss Reynolds made no reply. She remembered nothing of the trick, and knew not who it was that addressed her. Miss Dewey saw that something unusual had occurred. She probably suspected the true state of the matter, for she had been fully told of the singular changes to which Miss Reynolds was subject. So she became silent.

"Miss Reynolds dressed herself and found her way down

stairs, wondering and perplexed, but waiting to see what would happen, and hoping that something would soon occur that would solve the mystery. Mrs. Kennedy (afterward the wife of Mr. John Reynolds) came into the sitting-room, and spoke in her usually cheerful manner; but Mary knew her not. Soon after her brother John entered the room. Then all was at once explained. In both states she knew him. In both states she knew that he resided in Meadville. So she knew she must be in Meadville. She informed him of the occurrence of the change, though there was little need of it. The observation of a moment or two, and the change in her disposition, were sufficient to reveal to her friends the transition from one state to the other. She was then introduced anew to those among whom she had so strangely fallen. She remained at Mrs. Kennedy's, in Meadville, for some days, and then returned home.

"Very soon after her return she awoke one night, and arousing a sister with whom she was sleeping, she exclaimed, 'Come, Nancy! it is time to get up and play that trick on John!' She had changed into her second state, and supposed that she was still in Meadville and sleeping with Miss Nancy Dewey, and that it was the same night on which they had planned the joke. When she found she had returned to the 'Nocturnal Shades,' as she called her home in Venango when she was in her second state, she was much chagrined, for the larger society she found in Meadville was, in that state, much more to her taste.

(E) "The foregoing statement illustrates two things. One is, that she did not in one state recognize acquaintances of the other state; the other is, that there was a blank in her memory of the period, however long, passed in a given state when she passed into the other. Thus weeks and months disappeared during one sleep. And the sleep from which she awoke seemed to her but the continuation of that into which she had fallen long before.

"During the earlier period of these changes she manifested, while in her second state, many symptoms of wild-

ness and eccentricity, amounting almost to insanity. Proof of this is found in her long abstinence from food and sleep, and in her indifference to, and even strong prejudices against, her best friends. 'For some time,' she writes, 'after I had been in my second state, my feelings were such that, had all my friends been lying dead around me, I do not think it would have given me one moment's pain of mind. At that time my feelings were never moved with the manifestations of joy or sorrow. I had no idea of the past or the future; nothing but the present occupied my mind.'

"She was also very restless, and had a strong and uncontrollable inclination to wander off into the woods. Being utterly devoid of fear she could not be restrained by any representations her friends made to her respecting her perils from rattlesnakes, wolves, and bears, all of which were numerous in the vicinity. These things made her friends solicitous, and caused them to keep as close a watch as possible on all her movements.

"It has been already stated that she was very careful to keep the letter of her word, though she did not feel herself bound by its spirit. She seemed rather to delight in finding some means or pretense of avoiding that, as giving her an opportunity of boasting of her smartness. She was very ingenious in finding such pretenses. But when once she promised to do or not to do a certain thing, her family and friends had perfect confidence that she would keep her word.

"On one occasion in her ramblings she met a bear. She was on horseback riding along a path when she met it. In giving an account of the adventure on her return home, she said she had met a 'great black hog,' which acted very strangely. She said it grinned and growled at her, and would not get out of the way. She said her horse was frightened, and wished to turn back. She ordered the black creature to leave the path, but it would not mind her. 'Well,' she said, 'if you will not get out of the way, I will make you.' She was about to dismount

and attempt to drive it from the path, when it slowly retreated, occasionally stopping, turning round, and growling. She used to insist that the bears with which her friends sought to frighten her from rambling off too far, were only 'black hogs.'

"About the same time, in one of her rambles, she saw a rattlesnake, with the beauty of which she was struck. She attempted to capture it. Instead of making battle it attempted to escape. It ran under a heap of logs. She seized it by the tail just as it was disappearing. Providentially her foot slipped, and to save herself from a fall she let go the snake. She afterward thrust her arm into the hole, but it had gone beyond her reach. It was known to be a rattlesnake both by its appearance and by its rattle. She afterward became familiar with the species, and remembered that the one she had pursued was like those which she now knew.

"During this stage of her history there was one person, a brother-in-law, who had complete control over her. This was another proof of an unusual, if not of an insane state of mind. She did not dare to disobey his commands, yet if he left any opportunity she would evade them. For instance, one morning he said to her, 'Mary you must not ride over the hills to-day.' This he considered equivalent to telling her that she must not ride at all, as her home was surrounded with hills, and she could not avoid them if she followed any road. But as soon as he was out of the way she got a horse, left home, and was gone nearly all day. In the evening he said, 'Mary, did I not tell you that you must not ride to-day?' She replied, 'No! you told me I must not ride over the hills, and I did not; but I rode through all the hollows I could find.'

"Another singular fact should here be mentioned. During that same period in the history of her case, immediately after falling asleep, she would, in an audible voice, narrate the events of the day in which she had been an actor, sometimes laughing heartily at some joke she had played off. She would then lay out her plans for the next

day. After this she would become silent. The next day, unless thwarted, she would attempt to do all she had proposed, and in the order she had marked out. It has been stated that none of the knowledge or experience which Mary Reynolds had acquired during her early life, or while she was in her 'first state,' remained in her memory or passed over into her consciousness while she was in her second state. To this, however, there was one remarkable exception, the nature of which can best be stated in her own words, contained in the narrative from which I have before quoted. She says:

“ ‘When I was for the first time in my second state, the family were one Sabbath preparing to go to Church at Titusville. I was very anxious to accompany them, though at that time I was wholly ignorant of what preaching meant. They told me it was impossible for me to go. So, much to my dissatisfaction, I had to stay at home. On the night following that day I had a singular dream. I have a more distinct recollection of that dream than of any other thing which happened about that time.

(F) “ ‘I dreamed that I was on a large plain, where neither a tree nor a stump was to be seen. It was beautifully green. A great number of persons, all clothed in white, were walking to and from a large river which flowed through the midst of the plain, singing as they walked. The music was the most delightful I ever heard. As I was standing and gazing with admiration on the scene before me, I thought my sister Eliza, (who was dead), came up to me from among the throng, which had by this time collected—for I thought they increased in number very rapidly—and, with a sweet smile on her face, talked with me. Among other things, she told me I should join that company after a while, but that I could not then. While she was conversing with me I saw a very majestic person approach and ascend a platform that was erected about the middle of the plain. He opened a large book which he held in his hand, and began to speak, giving out for a text, Revelation, iii. 20: ‘Behold, I stand at the door, and

knock: if any man hear my voice, and open the door, I will come in to him, and will sup with him, and he with me.' I was perfectly enraptured, for I thought he spoke to none but me. His eyes seemed to be directed toward me. 'Well,' I thought, 'this must be preaching; for in my dream I remembered how I had been disappointed the day before at not being permitted to go to meeting, and I thought he knew my case, for he explained the Scriptures to me. The next day I repeated several passages, though at that time I could not read a word. It seemed that after that dream I regained all my knowledge of the Scriptures. I frequently repeated passages of Scripture; and when my friends, in reply to my assertion that they were contained in the Bible, would ask me how I knew that to be so, I told them the person whom I heard preaching in my dream made me acquainted with them.

" 'When I arose the next morning after my dream I related it to the family, and observed to them that I had been to a much more splendred meeting than the one at which they had been.

" 'In my dream I did not mingle with the company; but after I saw the person who ascended the pulpit, and when he commenced preaching, I became so interested that my attention was no longer attracted by the multitude, who were still moving about. But my sister remained by my side.

" 'After this I used frequently to dream of seeing her. Particularly if any thing troubled me, she would appear to administer comfort. I loved to dream of her, though when awake I had not the slightest recollection of her. It was a remarkable circumstance that my sister and another particular friend, also dead, used to be my almost constant companions in my sleep. I have not dreamed of them since the earlier periods of my changes. I have wished much that I could, though at this time I do not remember either of them except as they appeared to me in my dreams.'

(G) "All her friends testified, and some still live to tes-

tify, that at the time mentioned by her she appeared to recover her lost knowledge of much contained in the Holy Scriptures, though, as she says, she could not then read, and did not know the Bible from any other book. She never recovered any other knowledge in the same or like manner.

"Her parents were both very pious and intelligent—in sentiment Baptists. They had been, as I have before said, intimately acquainted with the Rev. Robert Hall and other distinguished ministers of the same persuasion in England. Among them was a maternal uncle. After the neighborhood had become somewhat settled, her father, William Reynolds, used to invite those living near him to come to his house on Lord's Day. He would read a sermon to them, and offer prayer with them and for them. His house was a well-known stopping-place. Often the pioneer ministers, chiefly Presbyterian, during their laborious missionary excursions, rested and preached at his house. Under such influences Mary must have made large acquisitions of religious knowledge, and become familiar with the words of Holy Writ. What she had thus acquired and subsequently lost, she recovered in the remarkable manner mentioned.

(H) "It should be stated that Mary knew the lady, who appeared to her in her dream, to be her deceased sister, not by recognizing her from memory, but by describing her appearance, and learning from her family that the description exactly suited the appearance of her sister. For in her second state, whether asleep or awake, she had no recollection of her sister as one whom she had previously known in everyday walks. One friend thinks also that he has heard Mary say that, in the dream, Eliza informed her that she was her sister. But this is not certain. It is certain, however, that she minutely described a person precisely corresponding to the appearance of her sister.

(I) "The indications of mental unsoundness which characterized the earlier portions of the time which she passed in her second state grew fainter, and at length wholly dis-

appeared after these changes had ceased, leaving her permanently in her abnormal state. This occurred about the year 1829, when she had reached her thirty-sixth year. She lived twenty-five years after this, wholly in her second state. (J) During this quarter of a century no one could have discovered in her any thing out of the ordinary way, except that she manifested an unusual degree of nervousness and restlessness; yet that was not sufficient to attract particular attention. She was rational, sober, industrious, and gave good evidence of being a sincere Christian. For a number of years she was a consistent member of the Presbyterian Church. For some years she taught school, and in that capacity was both useful and acceptable.

“During the last few years of her life she was a member of the family of her nephew, Rev. John V. Reynolds, D.D. Part of that time she kept house for him, showing a sound judgment, and manifesting a thorough acquaintance with the duties of her position.

(K) “Her death occurred in January, 1854. In the morning she arose in her usual health, ate her breakfast with a good appetite, and after breakfast went into the kitchen to superintend some matters in that department. In a few minutes the servant girl called to Dr. Reynolds, saying that his aunt had fallen down. He hastened to her, and assisted the girl in carrying her into the parlor, where she was laid on a sofa. The girl said that while Miss Mary was engaged about some matter, she suddenly raised her hands to her head and exclaimed, ‘Oh! I wonder what is the matter with my head.’ She said no more, but immediately fell to the floor. When carried to the parlor she gasped once or twice, but never spoke, and then died. She was thus gratified in a wish which she had often expressed: ‘Sudden death, sudden glory!’ She died at the age of somewhat more than sixty years.

“The foregoing narrative embodies all that I have been able to gather which seemed to me to throw any light upon this case of Double Consciousness, the most remarkable which has been recorded. My object in preparing it

has been to place before the public, and especially before those interested in mental philosophy the well authenticated facts in the case. That the case was a genuine one admits of no doubt. The leading facts are authenticated by a chain of testimony furnished by witnesses of unimpeachable character, covering the whole period. Mary Reynolds had no motive for practicing an imposture; and her mental and moral character forbids the supposition that she had either the disposition or ability to plan and carry out such a fraud; and had she done so, she could not have avoided detection in the course of the fifteen years during which the pretended changes alternated, and the subsequent quarter of a century, which she professed to pass wholly in her second state.

(L) "The phenomena presented were as if her body was the house of two souls, not occupied by both at the same time, but alternately, first by one, then by the other, each in turn ejecting the other, until at last the usurper gained and held possession, after a struggle of fifteen years. For not only did she seem to have two memories, each in its turn active, and then dormant; but the whole structure of her mind and consciousness, and their mode of operating seemed dissimilar, according to her state. Her sympathies, her method of reasoning, her tastes, her friendships, and the reasons which lead to their formation, were in one state wholly unlike what they were in the other. She had different objects of desire, took different views of life, looked at things through a different medium, according to her state.

(M) "That her 'second state' had its origin in, and was accompanied by physical disease, is evident from many considerations. She herself was conscious of this. In her narrative she writes: 'Whenever I changed into my natural state, I was very much debilitated. When in my second state, I had no inclination for either food or sleep. My strength at such times was entirely artificial. I generally had a flush in one cheek, and continued thirst, which denotes inward fever.' Physiologists, considering the time

of life when the strange phenomena of her life began, and the time of their termination, will form some conclusions as to their ultimate cause; but that the brain was the organ immediately affected is rendered probable from the convulsions that preceded the first change, and from the manner of her death, which unmistakably indicated that the brain was disordered. But the facts, as far as ascertainable now, fail to explain the special features of her case; the two lives, covering fifteen years, wholly unconnected with each other, yet each continuous from state to state; and the final settling down into a state of being lasting for a quarter of a century, and accompanied by no special indications of either mental or physical disorder, yet which had no apparent relation to or connection with that which she had passed for the first nineteen years of her life, and which continued through a portion of the succeeding fifteen years.

“The bearings of this case on the sanitive treatment of the insane, on questions of mental science beyond those alluded to, on questions of conscience or casuistry, and on the religious aspect of the matter, are left to the thinking world. None will be more ready than the author to receive light on any of these important and intricate matters.”

WESTERN THEOLOGICAL SEMINARY, 1859

ANNOTATIONS ON THE PRECEDING CASE.

There are several features of the case of Miss Reynolds, which have very important bearing in corroborating the plurality of personalities, and of the arguments which the author has presented in the foregoing pages of this work. It will be noticed by the reader, that this lady was born in England, and had, in coming to America, become subjected to a different climate, etc., from that which her parents and herself had previously experienced. She had become subject to fits which became severe at her mature age, for

which nature sought a remedy by the resort even to that of changing her predominant personality. In her changed state, at first, she retained nothing of her former personality, nothing except the faculty of pronouncing a few words instinctively, the meaning of which she did not understand. This shows how absolute was the change; and yet there lingered in a very small degree, automatic enunciations, which resulted from the acquirements of her former personality.

(A, page 147 and 148.) At the time of her first change, it was after a long sleep; and possibly this change succeeded a fit from which she never would have awaked had it not been to awake in another personality from that which had become too much exhausted to recover its mental action.

In her changed personality (B page 148,) she acquired knowledge faster than an infant, because that personality had experienced physical growth before its mental individuality had been awakened.

(C, page 150.) Her character and habits in the two states were wholly different. In her first state she was quiet and sedate almost to melancholy, with an intellect which the narrator called sound though rather slow in its operations; but in her second state she was gay and cheerful, extravagantly fond of society, of fun and practical jokes, etc. These are important considerations,—the sentences in the narration, page 150, are italicised by the author. It is evident that her first personality was one that she had taken on from some line of her ancestry—a diseased inheritance, which would eventually have destroyed her life early, had not nature made a successful struggle to change her personality.

(D, page 151.) Her handwriting in the one state differed wholly from that of the other. This, also, shows that a different personality used different nerve-fibres, which also set to action different fibrillæ of the muscles, therewith expressing a different mental entity.

(E, page 153.) The blank in her memory of the period of one state when she passed into the other, shows that one

personality, during that time, was passive; and when one personality was passive, it was not then subject to the experiences that bring fatigue on body and mind. And as we hear nothing in the account of the return of her fits, it must be judged that the long sleep of one personality had been salutary and recuperative in its influence.

(F, page 156—see the entire pages 156 and 157.) The dream was, doubtless, the result of a small glimmering revival of her former personality which remembered her sister Eliza, with whom her former personality had been well acquainted. And there was also a glimmering remembrance of the minister going into the pulpit, which she had often witnessed in her former personality; and the text, "Behold, I stand at the door and knock," had doubtless been the subject of a discourse heard when in her former personality, or at least it is very probable these words had been familiar in her former memories. And after that dream, while still in her second state, she regained all her knowledge of the Scriptures which she possessed in her former state. Here is a very important point in considering plural personalities. Her former personality, as regards Scriptural knowledge, and her second personality both acting together. This shows that not only can two hemispheres of the brain (see pages 53 and 54,) act either separately or together upon one subject, but also that it is possible for two entire hemispheres duplicated within themselves to absolute plural personalities, to have their separate different experiences, and also to act together to recognize a subject with unity.

(G, see page 157 and 158.) Though in her second personality she recovered the knowledge of the Scriptures which belonged to her other (former) personality, she did not recover any other knowledge in the same or like manner. This shows that Scriptural knowledge had made a peculiar impression on her former personality; and her parents being very pious people, as the context shows, and their anxiety, doubtless, exercised some psychological influence

164 ANNOTATIONS ON THE PRECEDING CASE.

over her to cause her to *regain so much of her former personality.*

(H, page 158.) There was, doubtless, sufficient partial revival of her former personality which caused her to recognize her deceased sister, though it seems her second personality did not hold her in remembrance. But the history upon this is not clear further than that "it is certain, however, that she *minutely described a person precisely corresponding to the appearance of her sister.*"

(I, page 158.) It could hardly be expected that a grown up body should awake in another mental personality and very rapidly gain experiences showing expressions which in all respects would appear to be absolutely normal. And especially would this be so while the second personality had not yet gained full power to retain its ascendancy over the individual.

(J, page 159.) During a quarter of a century she remained in her second state; and, doubtless, this resort of nature cured her fits and gave her a good lease of life.

(K, page 159.) She probably died of apoplexy in a manner not peculiar, nor remarkable any more than is often the case with many other persons.

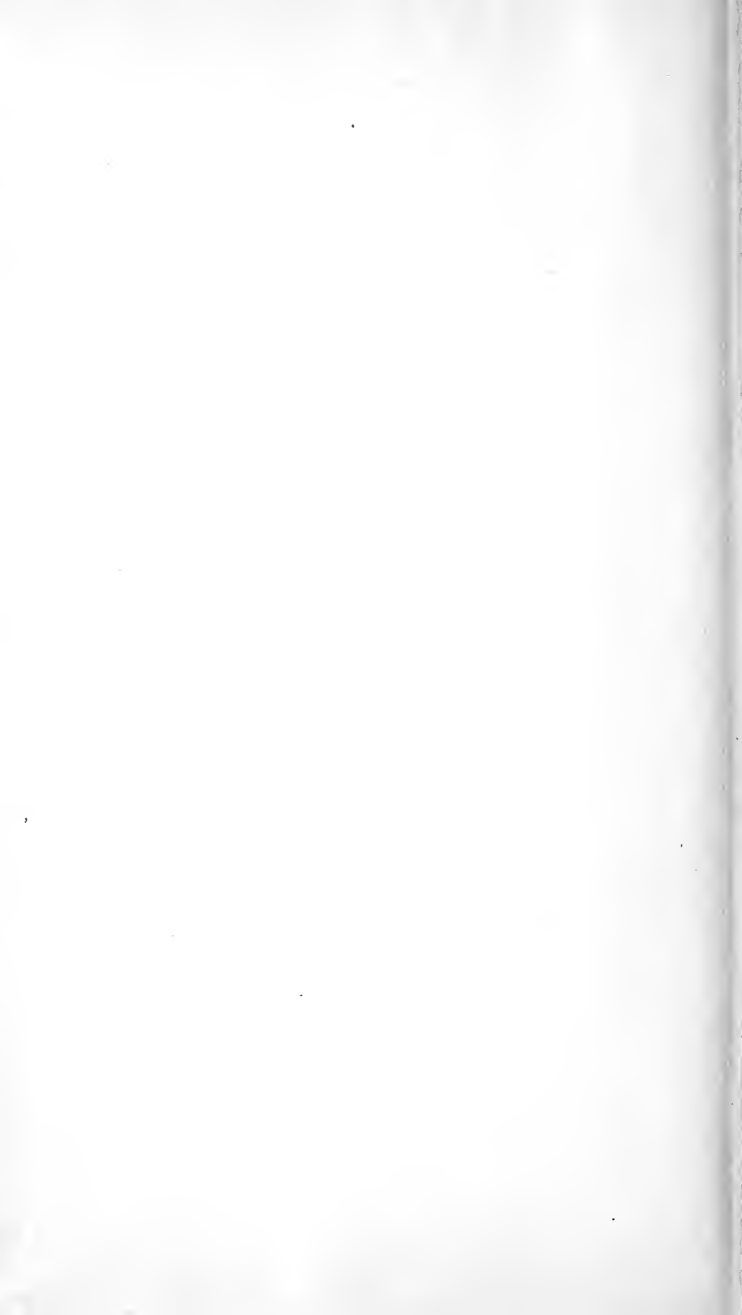
(L, see page 160.) It will be seen that the Rev. Wm. S. Plumer, D. D., recognizes that "the phenomena presented, were as if her body was the house of two souls,—of one and the other alternately, till after awhile one entirely superseded the other in its power of possession." The extraordinary phenomena of her existence seemed, in his opinion, to have no other interpretation; but the reader will see the bearing of the circumstance that her second personality became united with a portion of the first in recognition of Scriptural knowledge, and this proves, as before stated, a step towards and the possibility of the entire unity of plural personalities.

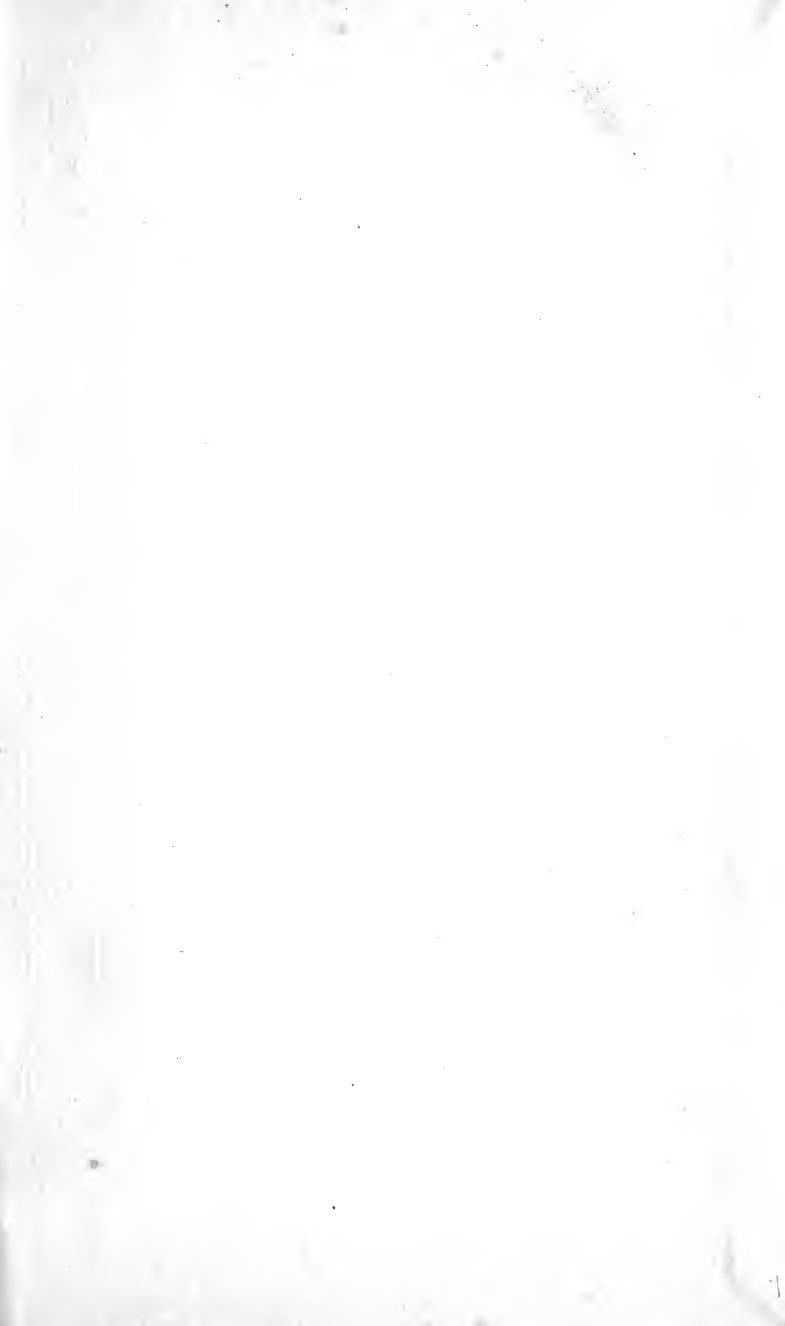
(M, see page 160.) Her second state had its origin in physical disease only in this way: It was the resort of nature to preserve her life; for she herself said, "whenever I changed into my natural (first) state, I was very much

debilitated." She did not complain of debility in her second state—her mind recognized that she felt strong, though she called this strength artificial, because she generally had a flush in one cheek and continued thirst. Anxiety from the strangeness of the change may have caused her to think the flush of the cheek to be oftener or of more importance than it was; for indeed the account (see the context, page 161), alludes to her "final settling down into a state of being (her second state) lasting for a quarter of a century, and accompanied by no special indications of either mental or physical disorder."

JAN 15 1911







LIBRARY OF CONGRESS



0 020 196 546 9